EDUCATIONAL REVIEW

EDITED BY FRANK PIERREPONT GRAVES

OCTOBER 1922

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FRANK P. GRAVES
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OCTOBER
1922

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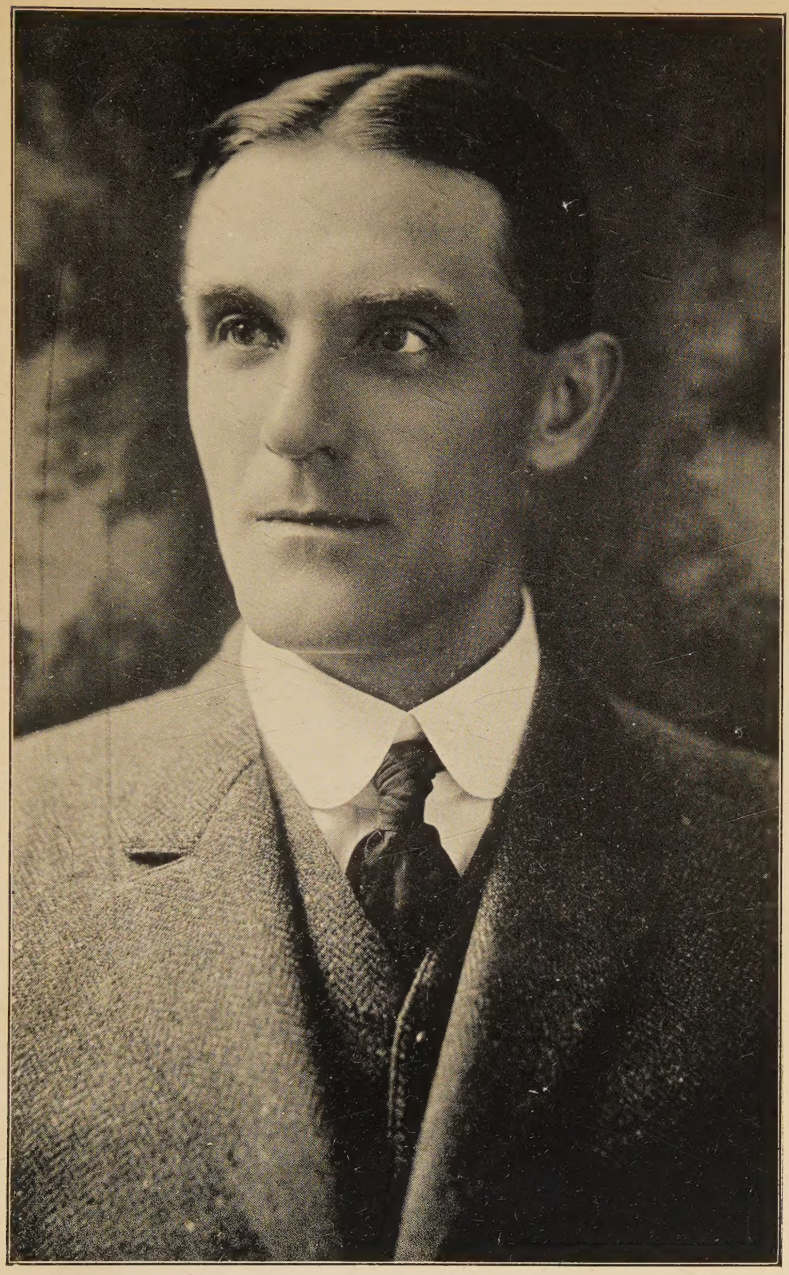

EDWARD C. ELLIOTT

As Chancellor of the University of Montana, Doctor Elliott brought the state to the first place in school efficiency on the Ayres *Index*. After seven years of service, he has now resigned to accept the presidency of Purdue University

ANNIE WEBB BLANTON

State Superintendent of Public Instruction, Texas. Miss Blanton, prominent among the state superintendents of the country and in the direction of the National Education Association, is this year a candidate for Congress from Texas

HERBERT S. WEET

Superintendent of Schools, Rochester, N. Y. Doctor Weet was educated and obtained his experience in Rochester. As superintendent of schools there he has developed the system of public education and, particularly, the junior high school plan, into a model for the entire country

HENRY W. HOLMES

Dean of the Graduate School of Education, Harvard University. This new school, headed by Doctor Holmes, while established but two years ago, bids fair to become a formidable rival to institutions much longer established

EDUCATIONAL REVIEW

OCTOBER, 1922

CAN WE PAY FOR EDUCATION?

EDWIN B. STEVENS

A NATION, like an individual, has times of depression. These usually come with sickness or exhaustion. Our present state is a result of war. While the fever lasted we worked harder than usual; when the fever departed, so in a measure did our strength and our confidence. And while strength is being regained and confidence secured, there is danger that the mental state of sickness continue after the physical symptoms have gone. The social physician must combat this. Some of the sources of confidence have been swept away. Perhaps the most important of these is the feeling of security due to isolation. The old world is breaking in on the new. Old-world physical, mental, and social diseases are threatening us. A hundred and forty-five years of isolation does not carry with it immunization. On the contrary we are much more subject to attack. It is this knowledge that makes us sensitive to the new-world relations in which we find ourselves.

We are now confronted with world problems of which the solution is not yet clear. We must preserve home, city, nation, race—powerful interlocking interests. The national armies, welded for a time into an international force by necessity and by the genius of Foch, have left but a trace of world consciousness. President Wilson's idealism blazed forth, but failed to kindle the soggy fuel. Another administration has a vision of world relations and is carrying on. It is a tiny blaze, but the tinder is in better condition, and the world is daring to hope that it may yet feel the warmth of

sacred fire on the altar of good-will among nations. Progress will be slow, but we must be content if it only be progress and not retrogression.

Confidence based on aloofness and ignorance must be replaced by confidence based on acquaintance and knowledge. This is a large task, but one for which we have a large amount of material. The immigrants may do something for us while we are bringing them into touch with our language and institutions. Our public-school teaching and our text-books include a reasonable amount of the geography and history of foreign countries. Our population, fortunately, is of a diverse origin. This stimulates cultural advancement of the various racial stocks. A more intelligent social intercourse will help.

Fundamentally the question is social, but its solution is educational. This is hopeful. Through education an unlovely community may be transformed; through education it is possible for the children of foreigners to become American citizens; through education a state may advance in material prosperity and in the refinements of living; through education a nation may train and equip an army of five million men, and turn the balance in a great war in favor of righteousness; through education the pagan ideals in the hearts of countless thousands each year are being replaced by Christian ideals, and faith in God is replacing fear of devils; and through education progress is replacing stagnation, and happiness is replacing misery in the dark corners of the earth.

With the need of education more evident than ever before, the educational forces are confronted with a critical, and in some places, a hostile attitude which has not been equalled for years. The legislature of one state adjourned without making the customary appropriations for higher education;[1] in other states the reasonable amounts asked have been cut so as to make necessary serious curtailment of privileges. Tuition in state institutions has been increased and limita-

[1]This was Oklahoma. The legislature reconvened and passed the bill, but the significance of such a gesture is startling.

tions on enrollment have been advocated. The grade and high schools have been forced to cut down instruction, to discontinue free text-books, to shorten the school year, and to become lax in the enforcement of truancy laws. And this has come at a time when the demand for trained citizens is greater than ever before. The reasons for this hostility are economic. They are born of the readjustment. Public expenditures have advanced with inflation and have not correspondingly diminished with deflation. The fact that education very meagerly took part in the inflation is overlooked.

At this point it may be well to consider a few figures. Public-school expenditures in the United States increased from $141,000,000 in 1890, to $215,000,000 in 1900, to $426,000,000 in 1910, and $764,000,000 in 1918—over five times. Taken alone, these figures are formidable. In the same period the population between the ages of five and eighteen years has increased from 18,500,000 in 1890 to 22,000,000 in 1900, to 24,000,000 in 1910, and to 28,000,000 in 1918—over one half. The annual expenditure per child of school age has increased. In 1890 it was $7.58; in 1900, $10.04; in 1910, $17.50; and in 1918, $27.58. The only encouraging thing about these figures is the fact that they have increased. These meager per capita expenditures explain eloquently one reason for the nearly twenty-five per cent. of illiterates among the men called to military service in 1918. The average allowance was about ten dollars a year. Only 50 per cent. of them were in schools, which were open but 71 days in a year. Our young men were not provided with schools. The 75 per cent. increased expenditure of 1910 over 1900 represented increased school facilities. The same assumption, however, cannot be made regarding the 55 per cent. increase of 1918 over 1910, when we consider what happened to the purchasing power of the dollar which dropped from one hundred cents in 1914 to sixty-one in 1918. It is common knowledge that in this period school facilities were seriously curtailed, a condition which still exists.

The per capita wealth of the United States in 1890 was

$1,034; in 1912 it was $1,984; and in 1920, $2,830. Wealth statistics are conservative, because they are based so largely on real property, which is valued for purposes of taxation. Such values are affected slowly by the fluctuation of prices. Many important forms of wealth are not included.

Insurance statistics are suggestive. The total income of the fire and marine insurance companies in 1900 amounted to $198,000,000; this increased to $386,000,000 in 1910, and to $1,103,000,000 in 1920. Life insurance policies increased at approximately the same rate; from $8,562,000,000 in 1900 to $16,407,000,000 in 1910, and $42,331,000,000 in 1920.

To make the comparison broader, figures drawn from some of the basic industries may also be examined. Take agriculture, for instance. The value of farm wealth produced in 1890 was $2,460,000,000; in 1900 it was $5,000,000,000 (over double); in 1910 it was $9,037,000,000 (nearly double); and in 1919 it was nearly twenty-five billion dollars (an increase of two and three quarters times in nine years). The values of the farm property increased during the same period. In 1890 it was $16,000,000,000 dollars; in 1900, $20,000,000,000; in 1910, $41,000,000,000; and in 1920, $78,000,000,000. In the products of the mines we find the following values for the year named: 1896, $641,000,000; 1900, $1,109,000,000; 1910, $1,988,000,000; and 1920, $6,707,000,000. Copper and pig iron production are closely watched as indicative of business conditions. In 1890 116,000 tons of copper were produced; in 1900 this became 271,000; and in 1910 it reached 482,000 tons. Peak production was reached in 1916 at 860,000 tons, falling off in 1920 to 504,000 tons. Pig iron production was 9,200,000 tons in 1890, 13,800,000 tons in 1900, 27,300,000 tons in 1910, reaching a peak of 39,000,000 tons in 1916, which was held for three years, falling off in 1919 to 31,000,000 tons and increasing again in 1920 to 37,000,000 tons.

The following chart furnishes a further study of figures that have a more or less direct bearing on the ability of society to pay for the larger educational facilities it is de-

manding. This chart shows certain basic national figures dealing with the products of the farm and mines, exports and imports, incomes of life and fire insurance companies, and public-school expenditures for the decennial years from 1880 to 1920. The significant feature is the comparison with the public-school expenditures. It should be noted

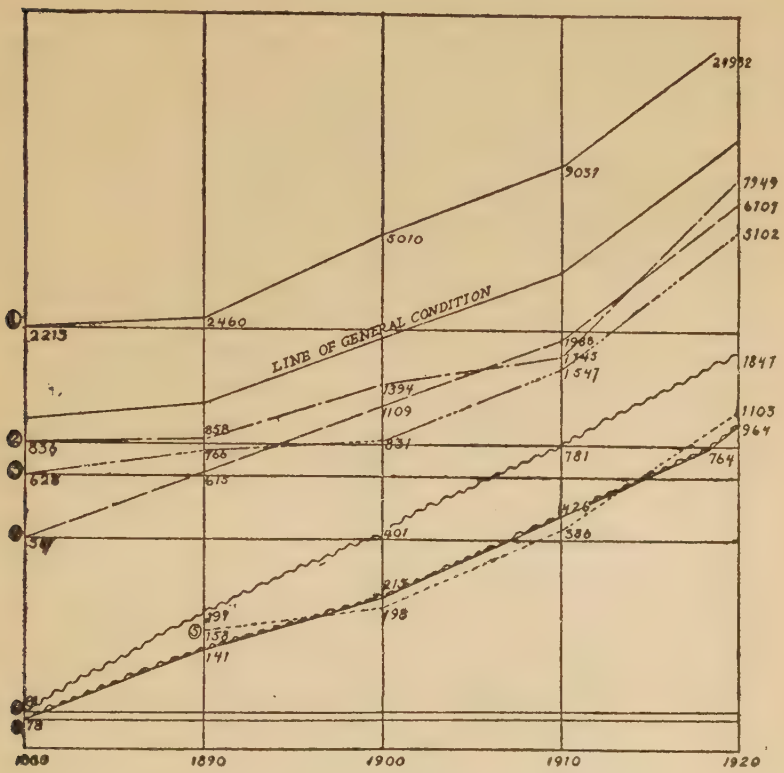

CHART NO. 1

Values of Products of the Farms and of the Mines, Values of Exports and Imports, Income of Life and Fire Insurance Companies, and Public School Expenditures. Line (1) Farm Products, (2) Exports, (3) Imports, (4) Products of Mines, (5) Income of Fire and Marine Insurance Companies, (6) Income of Life Insurance Companies, and (7) Expenditures for Public Schools. The line of General Trend is based on the figures represented by the upper four lines. The comparative rates of increase are indicated by the slopes of the lines. The figures used in the construction of this chart are given in the following table:

BASIC FIGURES FOR CHART NO. 1
(Figures are in millions of dollars)

Item	*1880*	*1890*	*1900*	*1910*	*1920*
(1)	2,213[1]	2,460[2]	5,010	9,037	24,982[3]
(2)	836	858	1,394	1,745	7,949
(3)	628	766	831	1,547	5,102
(4)	367	615	1,109	1,988	6,707
(5)	....	158	198	386	1,103
(6)	81	197	401	781	1,847
(7)	78	141	215	426	964

[1]1879 [2]1889 [3]1919

that since 1910 the relative increase is small. One significant comparison is the following: Society paid $141,000,000 for its public schools in 1890, the same year in which it paid the fire and marine insurance companies $158,000,000 million to protect it against the loss of buildings, furnishings, and merchandise. In 1900 and 1910 the situation was reversed and society paid more for its public schools than it did for fire and marine insurance, but in 1918 the old situation returns and fire insurance again becomes the more important item. At all times we have paid more for life insurance than for public schools, and the increase in this expenditure since 1900 has been parallel to that of the public schools. The significant thing, however, is the large number of items that show a rapid advance in the 1910–1920 period. We should have reason to expect a similar advance in public-school support.

These figures are given not so much to show that the public schools should have been better supported in the past—a thesis which has been maintained—as it is to show that increased provision for our public schools has gone along naturally with the general development of the country and that the total expenditures of recent years have been justified. These figures should satisfy anyone who fears that school expenditures in this country are increasing more rapidly than the ability of the people to pay. It is evident, too, that the expenditure for our public schools must increase in the future. The reasons for this are (1) the inadequacy of the

present and past provisions, (2) the educational needs of an increasing population, and (3) demands of an advancing civilization for an extension of our present facilities, especially in the field of secondary and higher education.

A careful study of public-school statistics was made by the Russell Sage Foundation under the direction of Leonard P. Ayres. This study concerned itself with the material available in the office of the United States Bureau of Education and covers the years from 1871 to 1918 inclusive. Data on ten different items were collected by states and for the United States as a whole. The figures on each item were reduced to components of an index number and the ten different measures united in a single index number. These ten aspects of school work were (1) per cent. of school population attending school daily, (2) average days attending, (3) length of school year, (4) per cent. of high school attendance to total attendance, (5) per cent. of boys to

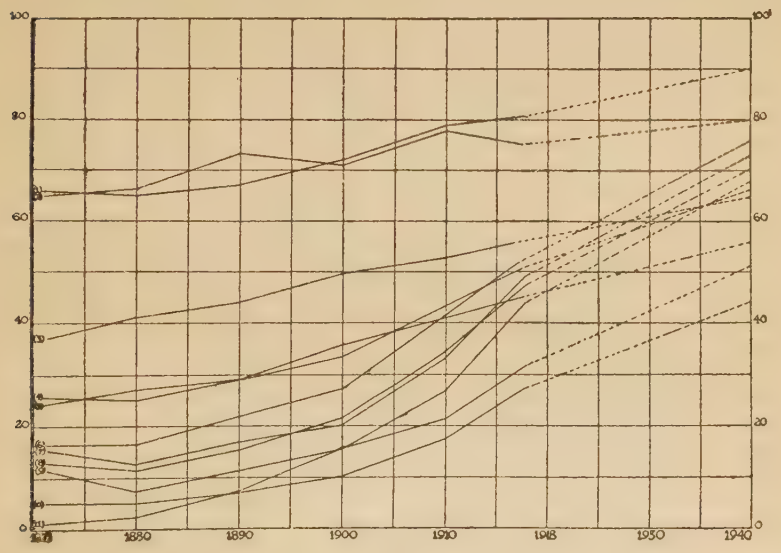

CHART NO. 2

Public School progress is here shown by Ayres' *Index Numbers* with these projected to the Year 1940. Line No. 4 shows the general trend. The other lines are explained by the following table.

THE AYRES INDEX NUMBERS USED IN CONSTRUCTION OF CHART NO. 2[1]

Measurable factor	*1871*	*1880*	*1890*	*1900*	*1910*	*1918*
(1) Average days open (x2)[2]	66.0	65.2	67.4	72.2	78.8	80.4
(2) Per cent. boys of girls .	65.8	66.3	73.4	71.4	77.9	75.7
(3) Per cent. school pop. attending	36.9	40.8	44.0	49.7	52.7	56.2
(4) Index (average) . .	25.6	25.4	29.6	33.7	42.4	51.0
(5) Av. days attended (x2)[2]	24.4	26.6	29.6	35.9	41.5	45.2
(6) Monthly exp. for tea. salaries	16.1	16.3	21.0	27.1	40.4	52.5
(7) Av. exp. per child attending	15.2	12.7	17.2	20.2	33.2	49.1
(8) Av. exp. per teacher (x2)[2]	13.1	11.4	16.1	21.2	34.0	47.6
(9) Non-tea. exp. per child att'g ($x\frac{1}{2}$)[2]	11.7	7.2	11.9	14.5	26.9	44.1
(10) Av. exp. per child sch. age	5.6	5.2	7.6	10.0	17.5	27.6
(11) Per cent. H. S. att. to total ($x\frac{1}{3}$)[2]	1.3	2.3	7.5	14.7	21.4	31.8

[1]From *An Index Number for State School Systems*, by Leonard P. Ayres.

[2]The figures in the table should be multiplied by this number to obtain the basic numbers from which these index components were derived. E. g.: In 1871 the average number of days the schools were open was 132.

girls, (6) average expenditure per child attending, (7) average expenditure per child of school age, (8) average expenditure per teacher, (9) expenditure per child for purposes other than teacher salaries, and (10) expenditure per teacher for salaries. While one might wish to know many other things about our schools, these were selected because comparable data were available. Each factor has a special significance and all together give a fairly satisfactory general view of the educational situation.

Several significant facts are brought out by this study by Ayres. The period from 1871 to 1880 was one of decreasing efficiency, the reason for which was the financial depression following the Civil War. Teachers' salaries did not advance, the school term was shortened and expenditures for purposes other than teaching were sharply cut. This period lasted for about fifteen years after the close of the war. School attendance increased but little, and while the pro-

portion of students in high school increased, it was in 1880 only three fourths of one per cent. of the total school attendance. The index for the period falls from 25.61 to 25.38. After 1880 the progress of the public schools is continuous, the advance after 1910 being especially marked. The proportion of the population of school age attending increased from 40 per cent. in 1880 to 56 per cent. in 1918. This is still deplorably low, but the improvement which has been made is full of hope. The percentage of high school attendance to total attendance advanced from less than one per cent. to over ten per cent. Teachers' salaries on a twelve-month basis advanced from $16 to $52; average days of school attendance from 53 to 90; average length of school year from 130 days to 160 days; average expenditure per child attending from $13 to $50; average expenditure per child of school age from $5 to $27; average expenditure per teacher from $23 to $95; expenditure per child for other than teacher's salaries from $5.60 to $22; the per cent. of boys to girls from 66 to 76.

The index including all these factors increased from 25 to 51. As the index of reasonable efficiency is 100, it is evident that our schools have a long way to go. If the past rate of progress continues, it will take thirty-six years to reach an index of efficiency of 80 per cent. At the present time there is a decided reaction against all forms of public expenditures. Much of this opposition is being felt by the educational and public welfare interests, which are largely non-political. Like the period from 1871 to 1880, this may be traced to a reaction from war. As this reaction has set in earlier than formerly, it may likewise be of shorter duration. The effect upon the public school will largely depend on the presentation of the public-school case by the schoolmen themselves.

Before leaving the Ayres index, it may be well to call attention to the components, which point to certain aspects of our public-school system that should be watched. The number of days of school per year, for instance, should increase. The ideal of 200 days is not too high. The present

average of 160 days is unsatisfactory. Likewise the per cent. of the school population attending school should increase. The 100 per cent. ideal is not unreasonable, while the 56.2 per cent. of 1918 reveals a situation calling for action. At the rate of past progress, a full generation will have elapsed before we reach a 75 per cent. efficiency in attendance. No demand for cheap labor in offices and factories must be allowed to deprive the youth of his school rights. This is a principle intellectually accepted, but slovenly applied. In some states there has been a falling off in this percentage since 1910. Boys, as well as girls, need the advantages of education, but past experience shows a slow zigzag progress with the indication that even in 1960 parity will not be attained. The girls even then will have a 15 per cent. advantage over the boys. The improvement will come as we cut down the present discrepancy of 24 per cent. The industrial, trade, and continuation schools are helping to solve the problem of the training of the boy and need increased public support. The average number of days attendance is now but 90.4, but the increase has been from 48.7, which gives us the right to expect a still further improvement. The ideal is two hundred days.

The expenditure for teachers' salaries has been low. The average per month on a twelve-month basis was but $16.11 in 1871, and in 1918 it was only $52.50. At this rate in twenty-two years it should reach $76, a figure which has been passed in some parts of the United States. The annual expenditure per child attending is placed at $100, a sum which is exceeded in some schools, but which represents an ideal for the nation that seems a long way off. Beginning in 1871 with $15.20, decreasing in 1880 to $12.71, and from that time increasing to $49.11 in 1918, we may anticipate a $74 expenditure per pupil in 1940. The line showing average expenditure per teacher tends to parallel that of the annual expenditure per child attending. Here $200 is the ideal, and the practice has run from $26.66 in 1871, $22.72 in 1880, to $95.22 in 1918, and the estimate is $143.80 in 1940.

It is estimated that there should be an average expenditure per child of at least $50 per year for other than the teacher's salary. It is this expenditure which makes the difference between an attractive, well-kept-up school and the reverse. In 1871 this expenditure was but $5.84, and even this sum was cut to $3.61 in 1880. In 1918 it was $22.04, and will reach $34 in 1940. According to the ideal the average expenditure per child of school age should be the same as the average expenditure per child attending. As we know, this is not in accord with our present or past experience. The large number of children of school age who are not in school is a continuing national disgrace and accounts for the great disparity in the figures given under these two heads. In 1871, for instance, but $5.62 per pupil of school age was spent, while nearly three times that amount was expended per pupil attending. The discrepancy is less in subsequent years, but is still great. It was $27.59 in 1918, which is a little more than one half the expenditure per pupil attending. The estimate for 1940 is $44 as compared with $74 per pupil attending. An examination of the statistics of the different states indicates that, where the expenditures for teachers' salaries and the expenditures for other than teaching salaries are highest, the per cent. of the school population attending is also greater.

The percentage of the school attendance in the high schools will continue to increase. No forecast from the facts presented could be more certain. In 1871 the high-school enrollment was but 4 per cent. of the total enrollment. The percentile increase has been constant, until in 1918 it was 10.59 per cent. and it is estimated that it will be 23.17 per cent. in 1960. The ideal suggested is $33\frac{1}{3}$ per cent. As this improvement and the others indicated as inevitable take place, there must be added provisions in the way of instructors and school equipment.

The situation with reference to higher education is much the same. As the high-school enrollments have increased, so have the enrollments in the colleges and universities. In 1870 less than one out of a thousand of the population (.8)

was enrolled in a high school; in 1890 nearly five (4.7) in each thousand were in high school; and in 1916 more than fifteen (15.4) were so enrolled. In 1870 the collegiate enrollment in institutions of higher education was about one per thousand of population; in 1890 one (1.05) per thousand; in 1900, 1.49 per thousand; in 1910, 2.02 per thousand; and in 1916, 2.58 per thousand. In the twenty-six years up to 1916 the proportion going to high school had more than trebled, while the proportion going to the colleges and universities had increased two and four tenths (2.4) times.

The thesis that has thus far been maintained in this article is further supported by the authoritative study of national income by the National Bureau of Economic Research[1], which has appeared since the estimates above were prepared. The results of this study of especial interest to us are the following: (1) The national income has increased in ten years (1909 to 1918) from $28,800,000,000 to $61,000,000,000, or on a per capita basis from $319 to $586. (2) These figures reduced to a pre-war basis of prices still show a per capita increase of income during the same period. (3) As compared with other nations, the income of the United States is greater both in the total and on a per capita basis. (4) "The net effect of our participation in the war was to diminish somewhat (at least temporarily) the inequality in the distribution of American incomes."

It is interesting to note that expenditures for public-school and higher education represent only one cent and a half on each dollar of the national income. The fluctuation during the period from 1910 to 1918 has been from a cent and a half to two cents. The highest year was 1914, and the lowest 1918. Beyond question the war brought trouble to education. With demands which have never been greater, society is not giving proportionately as large support as before the war. The following table brings out this point:

[1] *Income in the United States, Its Amount and Distribution, 1909–1919*, by the Staff of the National Bureau of Research, Incorporated. New York. Harcourt Brace and Company. 1921.

PART OF EACH DOLLAR OF THE NATIONAL INCOME DEVOTED TO ELEMENTARY AND SECONDARY AND TO HIGHER EDUCATION

	Elementary Secondary Education	*Higher Education*	*Total*
1910	$0.0136	$0.0028	$0.0164
1912	.0146	.0032	.0178
1914	.0167	.0036	.0203
1916	.0141	.0029	.0170
1918	.0125	.0025	.0150

In the decline from the peak of 1914 both elementary and secondary and higher education have suffered; higher education in 1918 received 30 per cent. less, and elementary and secondary education 25 per cent. less of the national income. During the same period expenditure for automobiles not only increased with our incomes, but at a somewhat faster rate. In 1914 it was 1.24 cents out of each dollar and in 1918 it rose to 1.31 cents.

Is, then, the popular clamor right? Have the expenditures for education reached a point beyond which they cannot go? Obviously they have not. In a few years the people will spend twice as much per capita for education as at present, and will do so willingly. It is better, however, that there should be a gradual improvement rather than a repression to be followed by a sudden expansion. Evolution and not revolution is the order in education. The task of the schoolman is to introduce economies—to make each dollar do double service—in order that, as the budget grows by small additions, the educational investment in service may come nearer to meeting the needs of the world.

THE PRESENT STATUS OF MENTAL TESTING[1]

STEPHEN S. COLVIN

I.

DEVELOPMENT AND GENERAL ASPECTS

ALTHOUGH intelligence tests in their present form date back but a few years, their origins are by no means as recent. The attempts to measure intelligence spring from two main sources—the psychology of individual differences and the psychology of the feeble-minded. The study of individual differences, begun by Galton in England, was made known in this country in the last decade of the Nineteenth Century, largely through the work of Cattell. Cattell gave psychological tests of the sensory and motor type to students at the University of Pennsylvania and later at Columbia University. The article by Cattell and Farrand appearing in the *Psychological Review*[2] more than a quarter of a century ago, gives an interesting statement of this work and the results achieved. On the side of the psychology of the feeble-minded, the efforts of Seguin cannot be overlooked. To him is to be ascribed the use of the form-board from which has developed a large number of intelligence tests of the performance type, both of the individual and group variety. The pioneer work of Binet of nearly two decades ago sprang from interest in feeble-minded children, and the desire of the school authorities of Paris to discover them and separate them from school children of normal ability. With the appearance of the first Binet scale in 1905 began the systematic attempt to measure innate intelligence. Binet's work was revised and extended by himself, and its methods and results soon spread to Germany and America. Indeed, it is to our own country

[1]This paper was read in substance before the Society of College Teachers of Education in Chicago, February 28, 1922.

[2]Vol. III, pp. 618–648.

that the chief service in perfecting and developing the tests of the Binet type, as well as other forms of intelligence testing, is to be ascribed. About ten years ago we find Goddard using the intelligence tests of Binet with the feeble-minded at Vineland. Likewise, Kuhlmann engaged in a similar work with the subnormal children at Faribault. Both investigators have added substantially to our knowledge of the intelligence of the feeble-minded and both revised somewhat and adapted the original tests of Binet.

To psychologists, however, whose prime interests were in the field of normal psychology, are due the most important revision of the Binet tests and their extensive use in measuring the various grades of intelligence of school children. In 1915 appeared the point scale of Yerkes, and a little later the Stanford-Binet scale of Terman. While the development of intelligence testing was going on, based on the original work of Binet, psychologists were employing various tests to determine individual differences. Cattell was followed by Wissler, who reports a study of mental and physical tests in the *Psychological Review Monograph Supplement.*[1] He finds a correlation of .19 between class standing and logical memory, an insignificant figure. His other correlations with academic grades are even lower. Tests were, however, improving and correlations with school standing were found to be higher. For example, Calfee,[2] working with freshmen at the University of Texas, found a correlation of .32 between psychological tests and school standing. Rowland and Lowden[3] found in their work at Reed College a correlation of .37. Waugh, at Beloit College, reported at about the same time[4] a correlation ranging between .54 and .24 between various psychological tests and college grades. Among other investigators working along similar lines and obtaining corresponding results may be mentioned Bell,[5]

[1]Vol. III, No. 6, pp. 1–61.

[2]*Journal of Educational Psychology,* Vol. IV, pp. 223–231.

[3]*Journal of Experimental Psychology,* Vol. I, pp. 211–217.

[4]New York *Times* Magazine Supplement, January 2, 1916.

[5]*Journal of Educational Psychology,* Vol. VII, pp. 381–399.

who used a considerable number of psychological tests with college freshmen, and who administered them to groups rather than individuals; King and McCrory, who tested students (in small groups of from ten to twenty-five) at the University of Iowa[1]; Miss Whitchurch, whose work with University freshmen was done in 1916–17, although reported only recently[2]; Kitson, who gave extensive tests at Chicago University.[3] Uhl tested freshmen in Northwestern University, and Haggerty made investigations at Minnesota.[4] Fretwell[5] made a study of intelligence tests and school marks, reporting between these a correlation of .57 and between intelligence tests and teachers' ratings of .66. During this period, also, Miss Downey[6] employed the adult Terman-Binet test with her students and found a correlation between their intelligence scores and marks in psychology of 0.527. Similarly, Miss Caldwell,[7] using the same test with students of Randolph-Macon Woman's College, found correlations with college grades as high as .69, the average being .44.[8]

At the same time, tests of the performance type were taking form.[9] Sylvester standardized the Seguin form-board about 1912; among others who employed it and adapted it in various ways may be mentioned Knox, who developed the "Casuist Form Board" in his work at Ellis Island. Goddard, Patterson, Pintner, and Witmer also should be mentioned here, as well as Gwyn, whose adaptation of the form board is known as the "Triangle Test,"

[1] *Journal of Educational Psychology*, Vol. IX, pp. 32–46.

[2] *Journal of Applied Psychology*, Vol. V, No. 4, pp. 318–339.

[3] *Psychological Monographs*, Vol. XXIII, No. 1.

[4] *Journal of Educational Psychology*, Vol. IX, No. 5, pp. 278–286.

[5] *T. C. Contributions*, No. 99, 1919.

[6] *Journal of Delinquency*, Vol. II, pp. 144–155.

[7] *Journal of Educational Psychology*, Vol. X, No. 10, pp. 477–488.

[8] Whipple, in his article on Intelligence Tests in Colleges and Universities, *Twenty-first Year Book of the National Society for the Study of Education* (1922), pp. 253–270, lists several additional institutions of higher learning in which intelligence tests were employed prior to 1918.

[9] For a comprehensive description of performance tests and a bibliography relating to them, see *A Scale of Performance Tests*, Pintner and Patterson, New York, 1917.

and Kempf, who originated the Diagonal Tests, also a modified type of the form-board. Goddard's adaptation of the board should be included in this list. Among other performance tests that are of the general form-board type and were developed and standardized prior to 1917, may be mentioned the Healy Mare and Foal Picture Board, Healy Puzzle A, Pintner Manikin Test, the Feature Profile Test of Knox and Kempf, the Ship Test of Glück, and the Picture Completion Test of Healy. Several other performance tests that are farther removed from the form board type also appeared at this time, the Cube Test of Knox, the Substitution Test of Woodworth and Wells, and an adaptation of the Maze Test to the testing of human intelligence and learning ability, with its final reduction to paper and pencil form.

Shortly after the United States entered the War, the various attempts at intelligence testing were brought to a head in the construction of the Army Alpha mental examinations for the literates and the Army Beta examinations for the illiterates. The army tests were the first instances of paper and pencil tests that were applied to groups of individuals on an extensive scale. The Alpha tests trace their origin more or less directly to the various psychological tests employed to determine individual differences, and to the Binet tests and their various revisions. The Beta tests were more closely allied to the performance tests previously mentioned, but were adapted to the paper and pencil form, and were designed, like the Alpha tests, for measuring the mentality of those tested in groups rather than through individual examinations.

The results of the army tests were so satisfactory that on the conclusion of the Armistice they were made public, and the Army Alpha was given widely in schools, colleges, and universities during the year 1919. Prior to this time, in the Fall of 1918, the so-called Brown University Test was given to the men in the S. A. T. C. and the Naval Unit at Brown. It has since been continued with all entering classes at that institution, and is now in its fifth year of trial. This fact is mentioned because it would seem to be the first group

intelligence test to be consistently and continuously used and standardized. It precedes somewhat, in point of time, the various group tests that have been devised and published during the last three years, in all numbering nearly forty separate tests.[1] The Brown University Test, to which further reference will be made later, is simply a compilation, with slight emendations, of several intelligence tests in use prior to 1918, which had been shown to be successful in indicating native intelligence. For them the compiler is particularly indebted to Trabue, Thorndike, and Terman.

The development and standardization of intelligence tests have resulted in four main types—two of which are for administration to individuals and two to groups. These are:

1. The Binet tests and their revisions and additions.
2. The performance tests for individual administration, including the various form-board tests, puzzle tests picture tests, etc.
3. The group intelligence tests of the Army Alpha type —paper and pencil tests for the most part of a linguistic nature.
4. The group intelligence tests of the Army Beta type, performance tests reduced to paper and pencil form, for use particularly, though not exclusively, in the examination of little children, illiterates, and non-English-speaking groups.

In connection with the compilation, administration, and interpretation of these tests, various questions of both theoretical and practical importance have arisen, some of which will be mentioned and briefly discussed at this time.

The first concerns the nature of general intelligence. The proper construction and use of intelligence tests implies a definition of what is being tested. Strange as it may seem, these tests have been developed without an adequate formulation of the meaning of the term "general intelligence," as commonly used by psychologists. The description of what is implied in this term awaits more

[1] See *Twenty-first Year Book of the National Society for the Study of Education*, pp. 93–113.

accurate determination and will be reached only when the results of intelligence testing have been more adequately worked over and formulated. However, all psychologists seem to be agreed that these tests seek to discover a native ability or a group of native abilities more or less closely related. So much is certain. The possession of this native ability by an individual, however, does not mean that he is born with full-fledged intelligence. Intelligence must be acquired in contact with the environment, but the extent to which this acquisition is possible is conditioned by the amount of innate mentality with which the individual is originally equipped. Some, like Spearman, consider this native ability a unitary central tendency; others, like Thorndike, believe it to be a group of more or less closely related abilities.

In attempting to define intelligence, psychologists have given expression to various and rather widely divergent views. Some would restrict intelligence to the higher levels of human mentality, identifying it with abstraction, judgment, and rational procedure in general. Others give very broad definitions, such as the ability of the individual to adapt himself to his environment. The definition which, for both theoretical and practical purposes, seems the most adequate is that intelligence is identical with or closely related to learning ability. An examination of the intelligence tests now in use will clearly show that they are so framed as to presuppose learning ability and to discover the ability for additional learning.

Secondly, it should be noted that intelligence is measured indirectly through what has been learned. We do not measure innate intelligence directly, but infer it by discovering what the acquired intelligence is. This means that *intelligence tests must be so constructed that the elements employed will be within the common experiences of those tested.* If this principle of construction is not carefully followed, the results of individual scores cannot safely be compared. Conclusions drawn from such scores as to the relative or absolute intelligence of those examined are untrustworthy.

However, such conclusions have been drawn in the past not infrequently, and they should not be taken at their face value.

Thirdly, we may discuss the I. Q. as a measure of intelligence. Binet expressed the intelligence of those examined by determining the mental age of the individual and comparing it with the chronological age. Later, Stern and Bobertag in Germany employed the ratio between the chronological age and the mental age to indicate actual mentality. Dividing the mental age by the chronological age, they obtained a quantity which has been termed the I. Q. (Intelligence Quotient). In this country Terman has extensively employed the I. Q. and around it have grown up certain assumptions and practices of considerable importance. Terman holds strongly to the opinion that the I. Q. is constant, within minor fluctuations throughout life. It varies little or not at all from early childhood to maturity and presumably remains practically unchanged throughout adult life up to the period of mental decay.[1] Terman finds the constancy of the I. Q. a most important factor in the prognosis of mental development and the prediction of school achievement. In regard to the constant character of the I. Q., numerous investigators, particularly Yerkes, are in substantial agreement with Terman. There are others that disagree, notably Doll and Matier,[2] these investigators working with feeble-minded children mainly. As far as sub-normal children are concerned, they find marked fluctuations and disagreements from year to year. Doll[3] states that the I. Q. is so lacking in consistency as to make its use of little value in the forecasting of later mental

[1]Josephine Curtis and Grace A. Taylor (*Journal of Applied Psychology*, Vol. IV, No. 1,) discuss the applicability of mental tests to persons over fifty years of age. They believe that there are decided changes in the distribution of abilities as persons get older.

[2]It is interesting to note that Binet did not assume the constancy of general intelligence from year to year. He writes: "It is understood that these diagnoses apply only to the present moment. One who is imbecile to-day may, by progress of age, become a moron, or on the contrary, remain an imbecile all his life. One knows nothing of that: the prognosis is reserved."

[3]"Growth of Intelligence," *Psychological Monographs*, Vol. XXIX, No 2, whole number 131.

development. It is worthless as a means of permanent classification "of such significant intellectual types as feeble-minded or gifted children." Wallin, likewise working with the feeble-minded, finds[1] that the I. Q. is of no value for the purposes of classification. Kuhlmann[2] finds in his investigation of 639 sub-normal children, that "the intelligence quotient decreases with age and more for the higher than the lower grades." Terman, in an article on "Mental Growth and the I. Q."[3] answers his critics. He states that he does not think that anyone would dispute "the contention that the I. Q. does not *always* remain constant, especially in the case of psychopathic subjects. Even as regards normal subjects, its constancy is never, so far as I know, referred to as anything more than 'relative' constancy, 'approximate' constancy, a 'tendency to' constancy, etc." An unprejudiced review of the literature on the subject leaves the impression that this statement of Terman is not far from correct, and that for normal children at least an I. Q., say of .90, will change but little during the period of development, and that it will serve, reasonably well, for prognosticating mental development and school progress. Thus it serves as a helpful practical device in teaching and administration.

Closely connected with the question of the constancy of the I. Q. is another, also of both theoretical and practical significance. Is the growth curve of average normal intelligence, plotted in equal units of absolute mental age increments, parabolic or linear in form? Is this growth regular or does it decrease with advancing age? Freeman attempts to answer this question.[4] He holds that the assumption "that intellectual growth follows a curve which approaches the logarithmic curve is not borne out by the re-

[1] "The Value of the Intelligence Quotient for Individual Diagnosis," *Journal of Delinquency*, Vol. IV.

[2] The results of repeated mental re-examination of 639 feeble-minded over a period of ten years, *Journal of Applied Psychology*, September, 1921.

[3] *Journal of Educational Psychology*, Vol. XII, No. 7.

[4] "The Interpretation and Application of the Intelligence Quotient," *Journal of Educational Psychology*, January, 1921.

sults of the point scale examinations. The preponderance of evidence, however, seems to indicate that up to some age in early adolescence at least the rate of growth is approximately uniform."

In reply to this paper by Freeman,[1] Peterson emphasizes the fact that curves based on point-scale norms are not in themselves intelligence growth curves. They show only the number of points scored at ages indicated under certain standard conditions. Freeman in reply states:[2] "The age-progress curve *when expressed in terms of annual increments of point score* appears to be approximately a straight line. The significance lies in the comparison of such age progress lines with others, *all of which have been obtained with the same kind of units.* Whether or not what appears to be straight linearity by such units is really such, or is something which more or less nearly approaches straight linearity than has been obtained from so many of the single tests . . . is a question chiefly of theoretical interest."

The conclusion of practical importance from the above discussion seems to be that when such a scale as the Yerkes Point-scale, or the Stanford-Binet is used, the median mental age growth appears as practically a straight line. In individual cases any marked deviation from this would warrant careful analysis and further investigation. It is further to be remembered that changes on an objective scale do not necessarily mean corresponding changes in the thing for which the scale stands, or which it is supposed to represent. The wave lengths of light as a physical phenomenon may be represented on a scale of straight linearity. This, however, does not correspond even in a most imperfect way to the sensory experiences that we include under the names of hue, shade, and tint. Similarly, it is possible that what is thought of by some investigators as the thing "general intelligence" may vary in a way quite different from that in which its metric representative varies. Frankly, however, why should we be interested in this metaphysical I. Q.? If

[1] *Journal of Educational Psychology*, March, 1921.

[2] *Journal of Educational Psychology*, March, 1921.

it exists, as some writers, such as Goddard, for example, seem to imply, it explains nothing. It is sufficient to know the variations and the progress of the empirical I. Q., the I. Q. of the Point-scale and the Binet scale. At this point we must adopt a frankly behavioristic attitude. For the present, metaphysics and mental measurement should have nothing in common.

Ruml,[1] in discussing the nature of general intelligence, takes issue with the ordinary view that general intelligence can be expressed on a linear scale. He does not believe that there is a linear regression between test performance and general intelligence. He questions the legitimacy of expressing these relations in terms of correlation coefficients. He declares that "general intelligence may be expressed as position in multi-dimensional space," and offers as an analogy size as made up of height and weight. Here, again, the practical as well as the theoretical problem arises. It is apparent from examining the large amount of data now published showing correlations between general intelligence and other abilities, that these correlations seem significant and that they form the basis of assumptions that work out helpfully in practice. Whether some other expression may not yet be found more helpful than that of the correlation coefficient with its assumption of linearity, is for the expert statistician to determine. At present the correlation coefficient is one of the most accessible and helpful ways of indicating this relationship. It will necessarily be used until something on the whole more suitable to indicate the facts and to deal practically with them is found and made available for the worker in the field of general intelligence.

Finally, we may inquire concerning the age at which mental maturity is reached. It is a well known fact that Terman in his investigations conducted in connection with the revision of the Binet scale fixed the mental age of the average adult at sixteen years, and considered any grown-up who fell below this norm as inferior in intelligence. Thus in his investigation of policemen, firemen and others, he found many below

[1] *Journal of Philosophy, Psychology and Scientific Methods*, Vol. XVIII, No. 3.

the average level of adult intelligence. To this conclusion of Terman, Doll[1] takes decided exceptions. Based largely on the results obtained from army testing, Doll fixed the normal limit at which mental growth ceases at 13.4 years. Terman[2] contests Doll's conclusions. He doubts that those men particularly selected by Doll for his investigations were representative of the entire draft army, and he does not believe that the entire draft army was representative of normal adult intelligence, since "probably only a small proportion of men in positions of even minor responsibility were drafted." Further, "the conditions under which tests were given in the army were far from ideal." He admits, however, that his sixteen-year estimate may have been too high. He says that it was frankly tentative. "Fifteen years may be nearer the truth. Fourteen may be, but I doubt it." It is to be hoped that soon we shall have additional evidence as to the age at which adult intelligence is on the average attained.[3] It is clearly of practical importance to know just what this age is. If adults of 13 years mental age are three years sub-normal, we should know this fact. Further, what can we conclude in regard to the foreign-born in the army whose average mental ages have been fixed as approximately ten years?[4]

[1] *Op. cit.*

[2] *Journal of Educational Psychology*, Vol. XII, No. 6.

[3] This of course means age in mental years, not necessarily in chronological years. Average adult intelligence, if placed at 16 years, does not necessarily mean that all normal individuals have reached complete mental maturity when they arrive at their sixteenth birthday. Some may reach this maturity at an earlier chronological age, others at a later chronological age.

[4] Dearborn, in a paper read before the Society of College Teachers of Education, February 28, 1922, submits evidence to show that the adult mental age should be placed at 14.5 years.

THE PROJECT METHOD IN COLLEGE COURSES IN EDUCATION

WILLIAM H. KILPATRICK

THE treatment here given of the project method will undertake to discuss four questions: What is here meant by the project method? How does its application vary with the advancing age of the student? What modifications are necessary to coördinate it with other demands? What actual applications can we make to college courses in education?

What, then, is meant by the project method? The main question is as to what degree and manner we can use the general project idea and point of view in our college classes in education. We are not concerned with any mere discussion of terms, much as such a procedure seems to appeal to some. According to the thought and practice of the writer, the project method indicates a point of view, rather than a specific device. It is, to be sure, a point of view that contemplates the method aspect of education, but it is no patent automatic self-working tool. Far otherwise. On this score, it is an ideal to be sought rather than a device to be applied. Moreover, it is not new. No one could by any stretch of imagination claim that purposing on the part of pupils is a new device or idea. No, it is not new, except in the degree of conscious consideration that is now being asked for it. We do, however, see partly, in a new sense and certainly in a new degree, the *why* of wishing purposes. More specifically, the project idea is the correlative of an effort to find and use a practical central unifying notion amid many valuable overlapping ideas and principles that have entered the study of education from a variety of sources.

That there is need for such a unifying idea will probably be admitted by all who have seriously faced the task of cor-

relating the different points of view found in educational literature. Consider how valuable are the following hopelessly over-lapping concepts and ideas, and how consistently they seem to point one unifying principle: interest, motivation, self-activity, attention; organization (of experience), comparative values; the concrete *vs.* the abstract; aims (on the part of pupils) *vs.* mere assigned tasks; first-hand *vs.* second-hand experiences; induction; mind-set, readiness, effect (as a law of learning); self-control, self-direction. Many others might be named, but these suffice. Now, in my judgment the notion of purpose—wholehearted child purposing—comes nearest of all conceptions I have examined to utilizing in practical fashion the values contemplated in the various terms set out above. The question, then, that I propose to discuss is as to how far we can in our schools of education feasibly utilize with our students this factor of pupil purposing.

Before we proceed, however, let us seek to describe the background upon which this project method conception, this wholehearted purposing as an educational ideal, is projected. And to fix ideas, let us center our attention for the time being on the middle grades. We shall later consider what changes are necessary as we depart from that region. First and most insistent in this background is the fact that there is a real necessity to get the pupil more fully "into the game." It is most evident that we are not eliciting adequately for worthy purpose the psychological resources of the child. We need to arouse these resources for greater efforts, for better organization of thinking experiences, for more enduring learning, and for the better building of character. Out of listlessness or indifference, not to mention cynical opposition, we cannot secure the educative results we properly seek. A second factor in the background is the fact that the child never learns just the one thing we and he may have in mind. He is willy-nilly acquiring simultaneously many other things, particularly in the way of attitudes and ideals. If a child is set to memorizing a poem, the half hour spent on this will show not only a well- or ill-

memorized poem, but certain attitudes or changes of attitude, good or ill, towards the poem, poetry in general, the teacher, the school, school life, etc. No intelligent educator can refuse to face this totality of learning. A third factor in this background, which can here be only hinted at, is that no sum of specific separate learnings can by any sort of combination make up the good life. The typical educational experience should be a selected sample of life itself. Real living requires practice under guidance just as truly as does handwriting or any other separated specific learning. This demand for practice in real living reaches much further than most are now willing to go. The last factor in the background to which attention is called is the demand of democracy. All of our students must be developed to participate actively and consciously in our common life. This requires a practice in self-directed activity which the school can no longer ignore. It is now upon this background of unutilized child resources, of many simultaneous learnings, of the necessity to practice living itself, of the demands of democratic self-direction and self-control, and in an effort to meet these demands that I myself, at any rate, have advocated the project method.

What, then, is a project, and what is meant by the project method? By a "project" I mean "any unit of purposeful experience, any instance of purposeful activity, where the dominating purpose, as an inner urge (1) fixes the aim of the action, (2) guides its process, and (3) furnishes its drive, its inner motivation."[1] By the "project method" I mean the effort to found the educative process on the use of projects, or perhaps better, the effort to use the project as here defined to meet the demands of the educational background discussed above. Let it be clearly understood that I am not concerned about the term project. That is of no consequence. It is the idea as given that we propose to use, —no mere term. That idea is of great consequence. Moreover, it should never be supposed that any one conception would meet all the manifold demands of even one major

[1] *Teachers College Record*, 22: 283.

point in our infinite world. But one is agreeably surprised to see how far this conception of purposeful activity will carry. The project method as thus defined is clearly an ideal to be striven for, and not a device to be applied merely upon the decision to take it up. It is, moreover, an ideal to be realized as fully as may be feasible in consideration of all the other pertinent demands of the actual situation. We may add that there are multitudinous specific approaches to this idea, perhaps infinitely many ways in which purposes may be utilized. The case method, for instance, of which you have just heard may well be one instance. We should also see the conception applied to the work of teachers as truly as to the work of pupils. For surely we are as much concerned to free teachers, that they may grow, as we are to free children from anything that hampers their growth. Fortunately both go best together.

With this clarification of the conception which we are here to discuss and apply, we may next ask: How does this project point of view vary in its application with the varying age of the learner? The question is the more pertinent that during the clarification of ideas we fixed our attention on the middle grades, on children of ten or twelve years of age. Our problem today, however, is to consider young people of nearly or quite twice that age. What pertinent variations enter, then, with increasing age? First of these is the increasing clearness and strength of purpose. As one gets older, specific ends on the whole assume clearer definition, with increase in deliberate choice of ends. In immediate connection is an increasing stretch of time during which a purpose holds. For our present inquiry this is of great significance, particularly in connection with the further factor of increasing self-control in the pursuit of the purpose. Not only then do we project clearer purposes further ahead in point of time, but we more persistently pursue them in the face of distractions.

A second variation with increasing age may trouble us, because its statement seems to involve a contradiction. As age increases there is a decrease in the "natural" or naïve

docility, but an increase in voluntary or willed docility. By the "naïve docility" I mean the disposition to look up to elders, as such, to accept guidance just because it is proffered, to believe on authority what is told. This disposition is likely due to the fact of childhood and its necessary dependence on elders. The willed docility, on the contrary, comes later; it is likely enough more evident at thirty than at twenty; we are more susceptible to it in college than in high school. I mean by this "voluntary docility" the disposition to put one's self where learning along a chosen line will better take place, the disposition to profit consciously by the vicarious experiences of the master, the willingness to go through a long procedure if suggested by a true master in order to learn. I remember when at twenty-five I was attending the university as a graduate student on money I had struggled to make and save. I resented that I was not more successfully stimulated to think. I had chosen my line, but unaided I seemed unable to progress. I was anxious to work, but I wanted to see results. Never was I more docile in that I wanted to be stimulated and guided. Never was I less docile as regards what I was receiving. I finished the year in disgust, determined to seek real masters. This willed docility is in a true sense but part of the increased tendency to persist in the face of difficulties. To seek stimulation and guidance is but a chosen means for attaining the projected end. Along with it goes increase of ability to work at length with an abstracted element of a situation; not that we forget the main purpose, but that we are able to hold subsidiary attention to some item of means until it is perfected for more effective use toward the main purpose.

There are other variations in the functioning of purposeful activity due to increasing age, but these are the ones that seem mainly to concern us. The effect of increasing strength and clearness and reach of purpose is to make possible the more persistent efforts in the face of distracting difficulties, and so to make possible a greater temporary turning aside and acceptance of another's direction in order that ulti-

mately the end may be the better reached. The purposing of the older pupil may seem thus paradoxically to abdicate in that it may lead to the readier acceptance of another's ideas and guidance. The abdication is, however, only apparent, as observation of disappointments will readily show. The possibility of this temporary acceptance of another's guidance underlies such successful work of the graduate school as seems to the face to violate the theory of good teaching. In a lesser degree it permits the college teacher to vary from the demands that hold more straitly with younger pupils. A warning should, however, be interjected: While this possibility of greater guidance is thus a fact, there is still no doubt to my own mind that any deviation from the strictest self-directed student activity is attended by some loss. We may gain in direction, but we lose in sense of self-direction, in personal organization, and in duration of the resulting learning. The gain of direction may more than counterbalance the loss; but in my judgment anything that lessens the adventure and sense of adventure, the responsibility and the sense of responsibility for the student, is attended by psychological loss. If we use guidance—as indeed we must—we must be conscious of what we lose as well as of what we gain. Some forms of guidance lose much more than others. What is the best form of guidance constitutes for us our problem.

This notion of gain and loss prepares us for the third division of the paper: How is the project conception to be adjusted in its application with other demands of the situation? Here, as elsewhere in the actual world of affairs, one faces a complex situation. Each serious decision in life must take account of a number of more or less antagonistic factors. Phillips Brooks used to say: "No one has a right to all his rights." The term compromise which here rises naturally to mind is not altogether felicitous. It smacks too much, first, of finally fixed elements, and, second, of mechanically paring these down to fit them together. Preferable is the figure of "composition of forces," where all factors still act, act simultaneously, but are none the less

combined in one joint result. Our bungling craftsmanship more often suggests compromise, but the ideal seems to be composition. Perhaps the most fundamental difficulty in this connection is the fact that civilization is (or seems to be) at variance with some aspects of our inherited psychologic make-up. The curriculum is, of course, the close correlative of civilization, while the human quality of purposing belongs more closely to our inherited inclinations. This conflict seems at times to forbid any hundred per cent. composition of forces. Another obvious and insistent interference with the plans of even the best of instructors are the available resources of the school. Classes may be too large. Library and laboratory facilities may be insufficient. Highly differentiated studies bring loss with their gain. An exacting course of study may so tie an instructor's hands that little can be done except to assign tasks and mark objective reports. The foregoing difficulties are in greater or less degree always with us, no matter what our theories of method may be. In a peculiar sense, those who would use the scheme of purposeful activity find themselves handicapped by a lack of suitable technique. Some of us are no longer young. We hesitate to try new experiments. In this practical situation of manifold conflict, all I can say is that each one must work out his own salvation. Salvation inheres in a fair consideration of all the factors involved. But my own opinion is that student purposing has hitherto been too generally undervalued in our actual procedure.

With this prolonged introduction we come to what should have been the body of the paper: What actual applications of the purposeful activity idea can we make in our college courses of education? The body of experience is so small, and the available data regarding it so much smaller that not much can be said. Clearly a technique for using adequately the idea is yet to be built. Let us ask first what we are driving at in the school of education. The answer to this question will have some bearing in weighing practices. The essential aim is this: To turn out teachers who will them-

selves grow and will cause their pupils in turn to grow. Growing is the criterion of all. More immediately, we will seek to build up in our pupil teachers as means to the more general end of growing: (1) an appreciation of the type of character that society needs, the lines along which growing can best proceed; this we usually expect to have built in the history and principles (philosophy) of education, in the social sciences and in literature; (2) the ability to see and use subject matter as the means of growth along the lines called for in the foregoing character, a conception which has hitherto proved very difficult to "sell"; (3) the ability to see and use method as the functioning of subject matter in and for growth; (4) the ability to see and use psychology as an aid to growing; (5) the ability to see and understand the process of growing as found in the "practice school"; and (6) eventually, the ability to guide the process of growing in pupils.

Now how in the light of all the foregoing can we use in our college courses in education the felt purposes of our students? We have here to consider, on the one hand, that our students can more fully accept subordinate purposes and abstracted tasks from their instructors, and, on the other hand, that our practical situations set limitations to what we should like to do. Let us consider the different types of courses commonly found in schools of education and ask what is feasible by way of carrying out the general idea herein discussed. More specifically, what can we do in each of these several fields, on the one hand, to arouse fruitful purposes in our students, and, on the other, to provide opportunity for the effectual pursuit of these purposes with a sense of student responsibility for procedure and results? What is here given is little more than a running comment upon some procedures that I happen to know more or less about.

In the history of education and in comparative education the use of student committees offers some means towards utilizing our idea. Let the class be divided into small groups. The study of problems with reports to the class

and class discussion is the procedure I have in mind. Several possibilities appear. Either the whole class may work simultaneously at the same problem, the groups vying with each other in the reports made; or one problem may be analyzed into several subordinate problems, each group taking one, and the class discuss the adequacy of the several reports made and join the whole together; or the two ideas may be combined. We should be inclined to vary the procedure, using first one and then another, each student at the same time carrying individually some term paper. The essence of this is group work at a common problem with class discussion and organization of the results. The more definite and gripping the problem becomes, the better work may be expected. This procedure means a giving up of any strict logical or chronological order of approach; but this by no means precludes the formation either of a logical or of a chronological order as a result of the study. It is hoped that such organizations would as conscious projects be sought in order to round out the work of the term or year. As matters now stand, the skill and personality of the instructor are decisive factors in success. Perhaps, however, most important is the instructor's willingness to subordinate information to the building of attitudes and points of view.

In the principles of education, the philosophy of education or educational sociology, the matter is probably not quite so easy. I have myself used discussion groups, setting them to work at questions devised to arouse problems, and having the class discussion bring together and coördinate ideas got together in study. As between this and lecturing or text-book assigning one can be in no doubt. This is immensely superior, even when the class is large. The amount of thinking done by the pupils is far greater and the learning attitude far better. With this plan, when the instructor does speak, the students wish to hear. It fails, however, to allow and consequently to secure any great amount of responsible planning of the work. With small classes something could be done to this end; but I have not

succeeded in this except with my most advanced group of graduate students numbering around twenty. It is to be hoped that some of our successors will succeed in devising a procedure, perhaps combining the plan suggested in the history of education with that suggested here, which will more adequately embody the psychological advantages of the project idea.

For educational psychology I have had neither personal experience nor personal observation, but I believe that some committee system would succeed for part of the work. Certain problems involving a study of printed sources and records, could be so handled. At other times actual experimentation is possible. In a number of colleges and normal schools the experiment has been tried of working out definitely planned courses in psychology on the basis primarily of questions, following thus much the procedure indicated for the philosophy of education above. I should much like to see all these combined with observation, both of the individuals themselves and of children in school, in such way as to build inductively a personal appropriation of educational psychology. It is easy to suggest what others might do, but I am distinctly hopeful of something along this line. Nothing, however, we may safely prophesy, will be accomplished unless the instructor sees better than is now commonly the case the true function of subject matter in securing student growth.

In measurements much could be done, if the instructor were willing to subordinate logical organization to the psychological approach. A great amount of practical work lies at hand to supply original projects. The committee system of conducting these, with class discussion to explain divergencies and coördinate results, would give a strong inductive approach. In practice teaching and the study of methods we probably have at once the greatest possibility and the greatest difficulty. If the aim is correctly given by the name and we seek merely to "train" teachers to some pre-chosen technique, then we have little opportunity for responsible purposing on the part

of the pupil-teachers. But if we seek to give, not finished technique, but some principles underlying the growing of children, then our outlook would seem to be better. Again the committee system of observation and report, and class discussion promises to help. If feasible, some early but limited trials at class management might give grippingness to problems. The more thoroughgoing study of theory, it would seem, should come only in connection with practice teaching. Many problems are available. I was recently told of a self-judging chart, worked out and applied by a group of apprentice teachers. This seemed to me an admirable adaptation of the project idea. The critic teacher in charge helped, but the whole was distinctly a class project.

It is disappointing to find that I can thus give so few suggestions as to the actual working out of the idea in our own courses. What has been suggested embodies at best a considerable deviation from the ideal of the theory. The spirit to will and much actual experimentation are necessary before any real contribution can be reported. My own unchecked observation convinces me that in proportion as I have been able to embody the ideal, in that proportion do I see my work succeeding. But the technique is as yet lacking. To be widely usable such technique must be the work of many hands, wrought out under widely varying conditions. In the meanwhile my faith in purposeful activity as an essential factor in real education grows ever stronger.

PRESENT SCHOOL MOVEMENTS IN GERMANY

P. H. Pearson

II

German Idealism in the Reforms

IT MAY be asked to what extent do German philosophy and science sway the reform attempts we described last month? German schoolmasters have not forgotten that Bismarck in 1888 credited them with winning the war against France. Are they by the same token holding themselves responsible for losing the last war against France? Whether they have analyzed their work in the light of the recent struggle or not, they have a clear conception of how indissolubly their work is identified with their country's victories and defeats.

The dominance of actual matter-of-fact work in all present departures tends to prove to the casual observer that teachers, reformers, and philosophers are all in favor of a practical education. But in its general drift and "notwithstanding the importance it assigns to manual, wage-earning, and commodity-producing work, the school reform in Germany is an idealistic movement." Educators enthusiastic over practical education believe with all their heart that they are serving ideal aims in their practical rôles. Their defeat in the recent war, they hold, was not due to weakness in practical knowledge, for Germany had the best technicians on earth, but precision in technique and progress in industry created a materialistic trend and rendered them callous to spiritual influences. The lack of a self-sustaining morale, which draws its energy from spiritual sources, was the precursor of Germany's defeat. Dr. Max Wundt said in May, 1920, "One of the most important causes of Germany's collapse was the uncertainty of the German people with respect to themselves as human beings. Other people have what we lack, namely, an outlook on life, a philosophy

of life." Dr. Rudolph Eucken, in his recent utterances before the Eucken Society, May, 1920, insisted on "more powerful unity in our life currents and a change in our view of the fundamental relation of man to the world. German philosophy must assert itself by entering as an element in the new school organizations."

"But," says Max Wundt, "while we have a highly developed philosophy, our people will none of it." Solid pages of German philosophy do not appeal either to the pupil or to the general reader, no matter how fully he may be convinced that what they contain is gold. Dr. A. Rausch points the way to prepare it for the schools. The old textbooks with their systems are unsuited to the needs of learners who are pupils. They need a book that grows directly out of educational science and experience, a book that touches their own concerns, rounds out what they study at school, and, by preparing them for life, prepares them for philosophy proper. Kant should be roused from his dogmatic slumbers and be asked to speak to the pupils about nature and the world. Philosophy should unite and apply all learning. How can a pupil attain morale in vicissitudes or stability in spirit, when all his experiences, individual and cosmic, are suffered to remain unrelated fragments in his head?

The First Moral Congress, which convened at Leipzig, March 30–April 1, 1921, under the same inspiration appealed to the German states to organize moral instruction as indicated by the Constitution. Ethics should be taught not in a closed system, but in the form of moral experiences growing out of a school environment shaped with such experiences in view. The moral lesson needs little explanation, no memorization, but to be learned it must be lived as an experience, a lesson form providing a personal situation. Eucken's abstruse exhortations to find spiritual strength and liberty in faith and art, must, if they are to serve the schools, be transmuted into living acts.

The school reform in Germany is an idealistic movement, in which speculative thought is no longer limited to the

secondary schools and the universities. It is pursued by the rank and file in their independent educational efforts. It enters as a part of the work in short courses instituted by workers and others. In the vacation courses at Leipzig experimental analysis of the will processes and the psychology of space and time were subjects of lectures and demonstrations. Psychological institutes to meet a growing demand are to be founded at Dortmund and Königsberg.

But, strange as it may seem, the influence of speculative thought is a pressure, not towards the abstract, but towards the concrete and practical. The demand for Freud's *Three Essays upon a Theory of Sex* illustrates the present hope among some educators to direct fundamental life currents in the interest of a healthier spiritual and physical life. Another procedure for the psychological study of adolescents, formerly in vogue and now resuscitated, is to study the diaries of young people as documents on their spiritual development. Children approaching puberty are, as it would appear, encouraged to record the emotional experiences they have during those years, that these diaries may later be used by the psychological inquirer. It is hard to believe that educators can encourage, or parents and guardians permit, those in their care to dwell on their emotions for the purpose of procuring data for the scientist. Such diaries would necessitate an introspection not suitable or wholesome for children, and would not be likely to yield facts sufficiently frank and dependable to be of use to the scientist. Speculative thought can render its best and most practical service without moving on these levels.

Spontaneous Educational Movements

The spontaneous movement among the young people of Germany is so manifold that its features cannot be gathered into a single picture. The movement finds expression in organizations of many kinds, each enthusiastically seizing upon its own objectives, yet all setting up the common aim of spiritual and intellectual regeneration and a newly created Germany. Young people's organizations branch out from,

and in connection with, political parties, church organizations, welfare groups, social workers' associations, labor groups and unions, and some, again, come into existence dominated by a spirit of defiant independence of all other organizations, religious, social, or political.

The activities of the group led by Muck-Lamberty look to an outsider like an impetuous social adventure of turbulent young people. In the summer of 1921 his New Group (*Neue Schar*) of artisans, laborers, teachers, and students of both sexes moved from village to village in Thüringia stirring up the inhabitants with both theories and examples of a new social gospel. These young people certainly showed an unusual disregard for the ordinary comforts of life, food, clothing, and other desirable commodities. Bareheaded and often barefooted, they tried to show the villages the joy of unconventional games, folk dances, and folk songs as over against the artificial lures of the theater, the café, and the white lights. They were, of course, often met with disapproval by people who did not appreciate their ill-timed innovations, but, again, some listened, and it happened more than once that Muck-Lamberty was permitted to preach his new doctrines in the village churches.

The association known as The Working Youth of Hamburg proceed in a similar direction. During the day they labor with their hands to earn the means of subsistence. In the evening they get together—young men and women—for the simple joys that their means afford. Their entertainment is not reserved for themselves as young people. Some way or other they seem to infuse their animation also into older men and women of staid habits and induce these to take part in the songs and dances. In the East End of Berlin young men and women of university education and high social standing have joined these impulsive groups of young workers. They meet in small units, often only twenty members, and, if reports of their activities can be accepted, they are setting a new pace and standard even in the exclusive circles of Berlin.

One might be tempted to characterize these trends as the

freakish effervescence of youthful energy, were it not for the fact that their expression is colored with something like religious fervor. A deep elemental force is here seen in its functioning. If it can be guided by wise leaders and through happy issues, it will leave its impress on the new organizations.

Adult Education

But from the rank and file come also educational endeavors with origins and aims more clearly definable. When democracy broke through, inequalities that make for class segregation were traced to different causes in different parts of Europe. In Russia the reformers who analyzed the causes found them to be money and inherited power, and proceeded to reduce individual inequalities of this kind as the first step in the reforms. In Central Europe the same inequality seemed to be mainly the result of educational opportunities enjoyed by some and denied to others. Hence in Central Europe the unity school with equal advantages to all was the first step towards reducing human differences growing out of educational inequality.

But this system, though holding out great things for the future, has nothing for the adults of to-day, among them the reformers themselves, who, at the age of fourteen, were obliged to leave school. These cannot, by the aid of any new law, be lifted into the rank and prestige of aristocracy that a career of study confers. But this human equality is the very aim and objective of the masses comprised within the sweep of the adult educational movement in Germany to-day. Although the labor parties and trade unions are foremost in establishing schools and courses for adults, the adult student does not select studies pertaining to the occupational domain of labor parties or trade unions. He does not choose engineering, mechanics, electrical science, accountancy, commercial geography, shop supervision, or business-management; he selects ethics, law, history, sociology, literature, æsthetics, languages, music, the fine arts. "Lecture to us," they told Professor Viehweg, "on civics,

socialism, communism; explain the laws of eugenics; tell us if you think there is a God." And then, independently of organized courses, the masses get together as art clubs, choirs, literary clubs, to reach out for something that the intellectuals seem to possess—the humanities of the universities.

Here lies the danger that tends to press the adult movement in a direction where it will fail of fruition. By becoming a university student late in life, the ambitious adult tries to win equality of the university stamp and pattern. In the first place, he sets a false valuation on the personal address that university life, rather than university studies, imparts: again, he fails to see that aims of scholarship and scientific research, to be successful, must be grasped in early years and from that time on be consistently pursued. With these thoughts in mind, Dr. Eugen Rosenstock, Principal of the Academy of Labor of Frankfort-on-the-Main, warns his students and followers of the danger of becoming imitations that by no means lead to intellectual equality. He points out, further, that within their own circle exist ambitious adults who may win intellectual equality and superiority in their own way, provided they are not lured from their purposes by the traditional badges of intellectuality.

As Director of the Academy of Labor, Dr. Rosenstock follows other principles. The students are chosen by the trade unions that support them, and if need be, their families, during nine months of study. The State pays the teachers while the University supplies lecture rooms and other facilities. In its instruction practice the University does not imitate a regular university by using methods of minute analysis, nor does it aim to train specialists in single sciences. In its courses are two subjects large enough for the most ambitious—Society and the Individual, and at the end of the year the two are combined in history. The Academy of Labor satisfies certain requirements arising from the daily needs of the workers. It will also help the worker to attain in his own way intellectual equality with other sections of society that have enjoyed educational privileges.

The general demand for humanistic, rather than a highly specialized technical education, insures the classical gymnasium continued prestige. The Danish "people's high school" fosters the native humanistic values, and as such is springing up everywhere on German soil; it snatches the laborer away from his toil wherever possible—during evenings when he has some moments to spare, or still better, for an unbroken period of two months and thereby gives him a brief vacation and a stimulus for his intellect.

Further proof that the reformers are impressed with general humanistic German culture is their enthusiasm for The Upper School (*Oberschule*). In its session of October 30, 1920, the Federal School Committee decided in principle in its favor. Years ago the interesting idea that inspired its creation was expounded by the noted educator, Frederick Paulsen. It is the most German of German school types, the ideal completion of the folk school. In this institution native sentiment and native lore dominate the instruction. One foreign language, either ancient or modern, is taught, —not for its own sake, however, but primarily for the sake of comparison calculated to make the pupil understand the genius of the German language. It has the sanction of Minister Haenisch, who has recommended for its courses such native works as Wrede's *The People of the Rhine* and Kaulmann's *Youthful Days on the Rhine.*

Material Difficulties

The work of reforms and reconstruction began promptly during the closing days of 1918. To the question as to how much has been accomplished by this time, the casual observer may say, "Very little." He may hold that there seems to be little difference between the German schools of 1914 and those of 1921. Teachers are using the same textbooks as of old, and are conducting the recitation in the same way as formerly. Even the old emblems, legends, pictures, and charts have not altogether been removed from the walls. Pupils walk in and out and carry their belongings in military fashion as of yore.

The Government itself may be changed in a few days by a *coup d'état*, but it takes generations to make over its schools. There are no new buildings or class rooms with legends and decorations emblematic of the new régime. The manner of the order issued in one locality, namely, to "remove the former Emperor's picture from the schools unostentatiously and preferably during vacation" shows the regard that the old traditions compel. Touching change of school books certain matter-of-fact considerations enter. The old arithmetics, grammars, chemistry texts, and nature-study books are still serviceable in the new Republic, and German parents, quite like American parents, protest against purchasing a new set of school books very often. The old history text, which was ruled out in 1919, has not as yet been replaced by a new one. But where is the textbook maker that has the temerity to write a book for the German history classes of to-day? In what terms should he speak of the Hohenzollern? How should he deal with the War and the Treaty of Versailles? How could he hope to strike a note that would ring true in the ears of Germany's shifting social, religious, and political parties? The reforms call for not only new textbooks, but for a new generation of teachers and a change in the very spirit of society.

Summary of Things Done

But, after all, can not the school reforms in Germany register some real achievements since 1918? The "unity school" has been established by the new constitution. The form for the instruction in religion has been left for the communities to determine. Elementary school teachers have been admitted to the university. The chasm between the folk school teachers and professors of the gymnasium has been bridged by associations like the "teachers' clubs." Special organizations, "district teachers' clubs," have been established in Prussia to look after the professional interests of the teachers. Teachers have been ranked in a salary scale with improved salary conditions. Parents' councils have been established. Student initiative has been en-

couraged. Radical and far-reaching changes have been made in the school courses by new forms for labor instruction and moral instruction. Among the laboring people an adult educational movement is securing help and guidance from university teachers. Schools for gifted pupils have been in successful operation in Berlin for three years, and are developing methods of instruction that are being adopted in other cities. Laws have been passed by states and municipalities to furnish means for gifted pupils to complete their training according to their respective endowments. Many private schools have been established in the rural districts to carry on their work as social communities. About five hundred people's high schools of the Danish type have been started throughout Germany. Institutions like the "Central Institute for Education and Instruction" function as clearing-houses for educational information. Laws have been passed for the eventual discontinuance of the private preparatory schools,—enactments which, together with the "unity school" laws, are calculated to counteract social segregation. Teachers' associations, particularly the "German Teachers' Union," are aiding the reforms by starting the publication of a series of monographs on all school questions. The old National School Council has been replaced by the National School Committee, whose duty it will be to draft the school laws of the nation and to expound the school articles of the constitution.

The entire structure of German secondary education has been lifted one year upwards by its new basis, the four-year foundation school, thereby increasing the time for the maturity examination from 12 to 13 years. Two new school types parallel with the classic gymnasium have become established, the German *Oberschule* and the modern *Aufbauschule* (upbuilding school). The former gathers into its courses the subjects that are in best accord with German national feeling; the second affords a direct road from the folk school to the university, and, again, by its several points of junction with other types tends to break the exclusiveness of a dual system.

HOW SHALL SHAKESPEARE BE TAUGHT IN HIGH SCHOOLS?

ALLAN L. CARTER

THAT high-school teachers chafe under the restraint imposed upon their work and their treatment of it by the colleges there can be little doubt. This restraint is noticeable chiefly in the study of language and literature, where the college has long been accustomed to stand in the relation of guardian to the school. The feeling is now fairly general that, were the relations different, considerable modifications in the subject matter of the different courses, even in those of preparation for college, might profitably be introduced. For long, arbitrary assignment of books to be read has made difficult any reasonably close articulation between the child's experience and the subject matter of his study, though there has been a slight amount of refitting of material going on of late years.

The essential difficulty in the presentation of literary subjects in the secondary schools, however, does not lie wholly within this point, for the method of presentation has become quite as arbitrary as the course of study. Furthermore, the manner of treatment of the various subjects in the high school, excepting, of course, those connected with the trades and with the household arts, crystallized early, leaving little to the initiative and to the imagination of the individual teacher; and innovation has been continually regarded by those long in control in any school with suspicion and distrust. Considered broadly, it is evident that instruction in English, together with that of the foreign languages, has suffered more from the inertia of tradition than the other subjects. Perhaps the college has exerted through too much conservatism in its own work a bad influence upon the high school; but the influence at this point has been that of example, hardly that of coercion.

In the conventional requirements in the reading of Shakespeare by high school pupils a suitable choice of plays is given in the college bulletins; and beyond roughly stipulating the matter, implying that the pupils should have a good grasp of the work studied, the colleges seldom go. There is little attempt narrowly to dictate either the method or emphasis of the study. In much of the study of Shakespeare in the secondary schools the teachers have felt that the subject has implied its method, and this gratuitous assumption goes far toward explaining our present unsatisfactory method of studying Shakespeare in the high schools.

It seems idle to suggest that if Shakespeare is to be read in the high schools, he should be enjoyed there. Yet the work is frequently made so unattractive that the students who go further in their study of literature at college are unwarrantedly chary of electing courses dealing exclusively with his plays. The question, then, seems legitimate: Why does Shakespeare bring so little joy in the secondary schools? The two chief reasons assignable are: (1) a bad choice of plays; (2) unsatisfactory manner of treatment.

The choice of plays is, of course, difficult; and it is conceivable that the selection of the wrong plays will do much to prejudice children against Shakespeare. But since plays such as The Merchant of Venice, Twelfth Night, As You Like It, Julius Cæsar, Hamlet, and Macbeth, are almost unfailingly made available, there should be no great opportunity for the mistake of bad selection. Romeo and Juliet requires, because of its mixture of beauty and coarseness, skilful treatment, and had, perhaps, better be left to late reading. The real cause for the dislike of Shakespeare is usually not referable to a bad choice of plays; it should be sought rather in the manner of treatment.

It did not require those exhaustive experiments made in Germany before the war to convince anyone who has taught, or who has been taught literature, that a poem of great beauty might be ruined by overinsistence of detail, by preachiness, or by too minute inspection of form and metrics. A nice discrimination and delicacy of feeling are required of

the teacher who would say everything necessary upon the subject and there stop, though classes are so unequal in the degrees of intelligence they contain, that the conscientious teacher often fears not to have made her point, hence long-drawn-out discussions with tedious repetition.

Moralizing is under favorable circumstances difficult to time, for it is a mistake to think that children are each day ready for the inculcation of lessons directed toward the evils of ambition, hot-headedness, deceit, miserliness, jealousy, tyranny, and the others. Moreover, in the hands of any but a skillful teacher, such procedure is apt to be insufferably dull to the pupils: the majority of the pupils of high school age are pretty sure to be lectured in their homes and by their friends. Dullness is now sufficiently known as the enemy of teaching, and it is certain to relieve teaching of its value. Many a saving grace has been suggested to the teacher through motto and precept, but none is more subtle and caustic than the caution of Dryden: "Trust nature; do not labor to be dull." Dull as it has been, the reading of Shakespeare in the secondary schools has never ceased to be regarded as the occasion *par excellence* for a lesson to the young. Each scene has come to be seized upon eagerly as a possible "sermon in little." Take the familiar instance of Macbeth or of Julius Cæsar. As the pupil hears day by day that ambition is a dreadful thing, he makes the mistake ultimately, for which we can not blame him, of ascribing to Shakespeare the pulpy moralizing of his teacher. Shakespeare becomes the austere, frowning mentor of uplifted finger, ready at a moment's notice to deny or to denounce. Setting out from this conception, it is a natural enough step to think Shakespeare "old-fashioned," since the pupils confuse his method, as they conceive it, with that of those unattractive persons who make it their office always to decry and to deplore.

This method of jejune moralizing from Shakespeare's work has been at the bottom of the least helpful criticism, while the most sensible criticism has inevitably sprung from the wish thoroughly to understand the play against its environ-

ment. When the teacher has come to understand better Shakespeare's relation to his own age, the study of which is almost as fascinating as that of his work, the task of making Shakespeare our contemporary, thoroughly agreeable to us, and of the warmest and broadest humanity, is little difficult. Shakespeare for the high-school pupil will then become an attractive figure: he will be the antithesis of continual negation.

Extremely regrettable is the custom still in vogue in a great many high schools of investigating every literary work to find out its purpose, because it makes even more disagreeably outstanding the less enjoyable features of literature. According to this kind of criticism, Shakespeare is believed to have concealed a major purpose in every play, perhaps, if one searches diligently, a minor purpose in each scene. So firmly is this idea of purposeful inspection ingrained into the minds of high-school pupils that invariably the first step in criticism of literary work in college is the inquiry about the author's purpose. The freshman does not feel comfortable upon hearing a short story like Mérimée's "Mateo" Falcone or Andreyev's "The Little Angel," if he can not say with certainty what the author is attempting to do. It is bound to strike the student as heretical when one suggests that the author may not have thought it necessary to include a lesson, even for freshmen. But if purpose there must be, why should the teacher not tell the truth and say that Shakespeare wished to write plays that would please his audience and bring satisfactory financial returns at the gate? Some teachers might feel by following such a frank course that an opportunity for moral uplift would be neglected. This is scarcely the point, however, as nothing would be lost which would be vital to an understanding, appreciation, or to the enjoyment of the plays.

Frequently the very fact that Shakespeare is so inclusive, that he does contain moral uplift, that he has purposes in writing, makes a study of his plays all the more beset with pitfalls. It is, in fact, a fortunate coincidence that Shakespeare should be as satisfactory in the study as on the

stage; but this fact should not blind us to the truth that Shakespeare's works are first of all intended for the stage, that they consequently lack legitimate fulfilment when they are considered only as reading matter. Moreover, the reading of a play scene by scene, almost verse by verse, makes it inevitable that the whole should be obscured in a jumble of parts, though only rarely are teachers at pains to show that the play is an entity. In the main, the teachers in the high schools seldom cultivate in their reading of Shakespeare anything approaching a sense of the dramatic. On the other hand, there is little need for insistence upon the fact that children of the high-school age are not beyond a lively sense of pleasure in histrionics; at the present, however, comparatively little time is devoted to the class presentation of scenes from the plays. An occasional informal class presentation would be much more satisfactory than the repetition of passages selected for memorizing.

If the high schools, then, were to leave casuistry, moralizing, inquiries into Shakespeare's philosophy, and all but the most obvious comment upon language and sources to the colleges, or to later mature reading and study, and were to engage in the task of realizing more of the dramatic possibilities, the genuineness and lifelikeness of the play, their reading of Shakespeare with their pupils would be pleasanter and more satisfactory toward further study. The instruction in the secondary schools being, unfortunately, in many of the smaller schools, at least, feeble and inadequate, it would seem easier and wiser to leave out of the plan of study all attempts at interpretative criticism and to substitute the more suitable work of seeing that the children understand and enjoy what they read.

As the teaching of Shakespeare is now conducted in the secondary schools, there are many college teachers of Shakespeare who believe that this work of forming an acquaintance with Shakespeare has no place in the high schools, partly because the majority of the teachers are ill-equipped, partly because the teaching of literature is seen less and less rele-

vant in a course which might exclusively be devoted to the important task of teaching children to speak simply and well, and to write directly and intelligibly. It is, of course, readily conceivable that the teachers in the high schools would be loath to give up what for many of them is the only bright spot in the curriculum: the teaching of literature. Then, too, there is always the objection that the majority of the children are not destined to study further: the high school is their finishing school, and it would be a serious handicap to deprive them of some acquaintance with literature. It might be shown, however, that bad treatment is worse than none at all; and unless those pupils who do not go further in their studies have a decided bent for books, they will not be inclined to deepen any literary acquaintance they may have established; while, on the other hand, those who like books will be quite sure to get access to them. Under the present régime there is unfortunately much confusion and little progress or sequence in the course of study in school and in college. The college teacher and the high-school teacher will have for the present to divide their tasks: the college will continue to devote the freshman year to the correction of insufficient punctuation and faulty sentence structure, while the high school will devote a part of its course to a consideration of the philosophy, sources, and thematic treatment of great writers. But if we turn our attention to the future, as the school system evolves, it will become increasingly important to have a few basic things well done at the start, and orderliness and progression will, it is hoped, obtain throughout in the presentation of literature, and eventually we may look for a program of fixed tasks and responsibility.

THE SOCIAL PURPOSE OF THE EDUCATION OF THE GIFTED CHILD

GEORGE S. COUNTS

THE gifted child is apparently coming into his educational inheritance, if one may judge from the attention he is receiving in our journals. He is being told on every hand that he has been grossly maltreated, and unless we take care he will come to believe it himself. It has become the fashion to hurl polemics at the public school for its neglect of the child of superior talent. Anyone who champions his cause is certain of the enthusiastic acclamation of students of education. In many quarters it has been lamented that the educational pace in American schools has been set by the average student with the consequent sacrifice of talent to mediocrity. And in the more progressive systems actual practice is being modified in various ways to make special provision for the gifted child.

Certain concomitant advances in the field of educational science have imparted impetus to this movement and added to its potentialities for good or evil. The invention and development of psychological tests have placed a powerful instrument in the hands of those interested in the education of the more promising children. By means of these tests it is already possible in a few minutes time to arrange a group of children into a series of sections rather carefully graded from the standpoint of either ability or attainments. No longer can the gifted child escape the vigilant eye of the educator, for he is almost certain to expose himself in these tests. We may consequently regard this mobilization against the gifted child as a serious matter, since the attacking party is so well armed.

But why educate the gifted child? Or at least, why single him out for this special and flattering attention? What are the peculiar functions to be performed by the

talented citizen in a democratic social order? How can the promising child be best prepared for the discharge of these functions? It is clear to anyone that all of these questions are fundamental and primary to any consideration of the education of the gifted child, but it must be admitted that they have received scant attention. It has simply been taken for granted that it is good to educate the gifted child more or less on the conventional lines, without inquiring too narrowly into the purposes to be served. This is due in part to our scorn of theories and theorizing, which is the natural reaction to the exaggerated theoretical emphasis of the older generation of educators. We also have an enthusiasm for a progress which is not always distinguished from change. We are a practical, optimistic, sanguine people who rejoice in movement itself without taking note of its direction. We are confident that things will be for the best. Even an American president has said that a benevolent Providence watches over the fortunes of fools and the United States. It is therefore not surprising that most of the discussion of the education of the gifted child has gone serenely on its way quite oblivious of certain of the more far-reaching considerations involved. But public education is a great social enterprise, and every departure in practice should be clearly and definitely related to social ends.

A technical advance in a particular direction unaccompanied by a corresponding adaptation of social controls may tend to destroy rather than conserve society. Many of the problems that the world faces to-day arise from the failure to subordinate inventions and discoveries to the larger human purposes. The very rapid development of mechanical inventions during the past century and a half has created a world for which we are not ready socially and morally. Now it is at least conceivable that psychological tests are to-day freighted with as large social significance as were these earlier inventions in the domain of physical nature. If ever used universally as they are used occasionally at present, they would be a powerful factor in determining the char-

acter of social stratification and might even bring into existence a new type of social order. We are forging a mighty instrument, which is neither good nor evil in itself, but which becomes either the one or the other according to the uses to which it is put.

Let us see just what form this special attention to the gifted child is taking. At least two tendencies may be observed in recent experiments. One looks backward, the other forward; one means a more or less complete return to the individual instruction of a century or more ago, the other a further extension of the notion of group instruction through the classification, into sections of relatively homogeneous ability, of all students pursuing a particular subject or belonging to a particular school year or grade. Since the latter plan apparently has some chance of wide acceptance in schools of at least moderate size, and since the rapid increase of population and the improvement of means of communication mean a diminution in the importance of the small school, where the return to individual instruction is possible, the discussion in this paper will center around the practice of homogeneous grouping, although much that will be said will apply to any effort to make special provision for the promising child. This plan, of course, involves the segregation of the gifted children from those of mediocre and inferior talents. For them the methods of instruction are changed somewhat to secure adaptation to a superior intellectual type; the course of study is usually enriched and deepened; and some provision is made for acceleration or more rapid promotion.

It is not surprising that this proposal of breaking the ordinary class up into several groups for purposes of instruction has evoked considerable and even heated discussion. The opposition has styled this practice undemocratic, because of the separation of the superior child from the mass. Our faith in the common man is thought to be repudiated through the double action of such a scheme. The individual of talent is exalted, and the stamp of inferiority is placed on the great majority. This has been

interpreted as at least reminiscent of a social order in which the masses are subordinated to an aristocracy, a conception that has always been *anathema* in this country and which is certainly contrary to the spirit of our institutions. It is feared that the separation of the gifted child from the mass of children will promote class distinction and develop antagonisms. Furthermore, it has even been maintained that the according of special attention to the gifted child is contrary to the fundamental conception of equality which, as an abstract notion, is dear to the hearts of many Americans. The extension of educational opportunity, so it is suggested, should bear an inverse rather than a direct relation to native talent, in order to diminish the inequalities of nature. The superior individual does not need the advantages that education can give in order to be successful in the struggle of life, while the individual handicapped by nature is dependent upon them. Numerous other objections have been raised to any plan involving homogeneous classification with special attention to the gifted child, but these two alone are pertinent to our discussion.

The arguments advanced in favor of such a plan are likewise many, of which we shall mention but two. It will be observed that they also are so stated as to appeal to the prejudices of our people. The doctrine of equality is again brought into service, but now as the doctrine of equality of opportunity. Every individual should be given the opportunity of developing his talents, so the argument runs. Consequently in each case education should be adapted to the needs and abilities of the individual, and since the gifted child has superior talents he has a right to superior and more extended educational opportunity. The position is also frequently taken that it behooves society to give special attention to the gifted child because of the greater returns that may be expected from the expenditure of a given amount of educational energy. With the limited resources placed at our disposal for educational purposes it is the part of wisdom to apportion those resources so as to secure the largest possible return; and, as in agriculture we till our

more fertile soils first, so in education our first and largest expenditures should be on the gifted child.

In each of these arguments, either for or against the giving of special attention to the education of the gifted child, there is something of truth. But in the main they are either superficial or inadequate. The problem is not grasped in its entirety. There are appeals to prejudice and even a certain blindness to facts. Those who oppose this departure do not realize its possibilities for good, while those who favor it are apparently unmindful of the size of the undertaking to which they are committed and of the difficulties to be surmounted. Our real task is that of utilizing an invention without sacrificing human values.

Let us, therefore, return to the question about which this entire discussion revolves. Why should special attention be given to the education of the gifted child? Certainly not because of any natural right to special privileges. Before the law and in the moral order we do not recognize inequalities. There is nothing sacred about the gifted child, nor is his education an end in itself that finds justification without external reference.

It is also clear that in a system of schools maintained through public taxation the only justification for unusual attention to any group, aside from a natural and laudable concern from humanitarian motives for the welfare of the peculiarly unfortunate, is to be found in the return that society may expect from such attention. As pointed out in an earlier paragraph, the individual of superior gifts is the best possible social investment. The truth of this statement, coming from those favoring the development, is apparent to even the most prejudiced. And it is undoubtedly for this reason that there is so much interest today in the education of the gifted.

But it is not clear that education in the accepted sense when applied to the gifted child necessarily means a social gain. The mere enriching and deepening of the curriculum will not automatically produce the result desired. Unless superior gifts are linked with a strong sense of social obliga-

tion, their possessor is a menace rather than a blessing to society. Add to superior gifts superior educational advantages and the danger to society becomes the greater. The need of society to-day is not only a more thorough development of the special talents of its members, but also, and perhaps even in larger measure, the dedication of these talents to some social purpose.

As educators we would be rendering a disservice rather than a service to society, if we should promote an educational innovation that would increase the power of its more capable members without at the same time making them more sensitive to the common good. Few societies have lacked talent, but in many that talent has been devoted to predatory purposes. It is probably this fact more than anything else that lies at the base of many of the objections to making special provision for the gifted child. There is a suspicion that the individual will forget his benefactor and turn his superior training to his own advantage. And who will say that this suspicion is not well-founded in a society in which profit rather than service is the dominant note of industry? Not infrequently the self-seeking individual has ascended to a position of power and influence and even respectability through ruthless disregard of all social obligation and the pitiless exploitation of the lives and fortunes of those weaker than himself. Certainly an educational system maintained at public expense should mitigate rather than foster these egoistic tendencies of gifted persons. This does not mean that opportunities for the expression of personal initiative will be denied the individual, as many superficial critics maintain. There is ample opportunity for the utilization of every bit of enterprise which the population possesses in efforts to gain more complete mastery over the forces of nature, and to abolish ignorance, poverty, disease, crime, social and race antagonisms, and vulgar and obscene appreciations. Some identify initiative with predatory activities, because so much of human energy has been turned in this direction. There is no place in a democracy for the notion that the powerful

have the divine right of exploitation and that the weak exist primarily to serve them.

There is growing reason for apprehension on this score in society as we know it to-day. Observe the effects of that process of urbanization and industrialization which has especially characterized the development of western civilization during the past century. Every succeeding census reports an increase in that proportion of our population living in the great industrial centers. In these centers the small virile community of intimate personal contacts and homogeneous interests has disappeared. Here we see the segregation of individuals into comparatively isolated groups according to talent, interests, or fortune. This constitutes a grave danger to social stability and welfare. Those gifted individuals who in an earlier generation would have occupied positions of leadership in their respective small communities, identifying themselves with these communities and being more or less concerned about the fortunes of every member, are to-day in the modern city associated together in a group of their own and have only remote and impersonal contacts with those of more humble talents. Feelings of class distinction, consequently, are appearing on every hand. The superior individual is loyal to his own group, sanctioning and defending an exploitation of the less favored members of society that he would not have tolerated in the little community. Thus in the great industrial societies of modern times there appear certain difficulties in securing that whole-hearted devotion to social amelioration on the part of the more gifted members which are not encountered in a less highly differentiated social order.

From the foregoing it is clear that the education of the gifted child is laden with serious consequences. Such a program should not be entered upon light-heartedly and according to the best traditions of American optimism. It is a matter of supreme concern, not so much to the individuals of superior gifts, as to the rest of society. The entire population must be educated regarding the nature and

social significance of individual differences. This will require the revision of certain of the traditions of our people and the development of others. Not only must we adjust the curriculum to the talents of the individual, but, what is just as important, we must also provide for the development of attitudes and ideals that will draft human knowledge and energy into human service.

The popular notion of equality must be revised. In so far as native endowment is concerned, inequality rather than equality is the first law of nature. Enormous differences are found in the case of every measurable trait, and no society can afford to close its eyes to this fact. A stable and worthy civilization must recognize the truths of science in every field. That one man equals another in physical strength, in the manipulation of arithmetical combinations, or in the ability to organize and conduct chemical research, is of course ridiculous. Nothing but evil can flow from the denial of inequality here. On the other hand, that men are equal before the law and that they are of equal worth in the moral order are notions that constitute a priceless social heritage and to which we should hold with tenacity. But we merely play into the hands of the enemies of society when we confuse the latter with the former sort of equality. Equality before the law and in the moral order are not objectively given, but rather are ends to be attained; and they can be attained only by the recognition of inequality in the realm of nature.

Because of this mistaken notion of equality, we have been reluctant to admit the existence of the individual of superior natural gifts. It is a point about which we have been sensitive, actually fearing perhaps to acknowledge that through no act of his own a particular individual may be born into the world with either a robust or feeble physical inheritance, a stable or unstable mental constitution. We have consequently maintained a tradition that any ordinary individual can perform the duties of a political office, whether it be that of city mayor, police commissioner, or postmaster. Place must be made in our traditions for the gifted citizen.

Our failure to recognize natural inequality makes impregnable the position of the gifted individual who uses his gifts for the purpose of exploiting the weaker members of the community in a perfectly legal way. He argues that all men are created equal, that each individual therefore reaches that position in society to which his industry and character entitle him, and that his own superior position is merely the expected reward of a life regulated by the virtues. He maintains further, and with some pride perhaps, that he is a "self-made" man, and that any other individual, willing to make the sacrifices that he has made, could as easily ascend to his position. Thus, while exploiting those less favored than himself, he applies as a balm to his own conscience the very doctrine of equality that he finds perpetually in the mouths of those he exploits.

It is clear, therefore, that we need not only a revision of the popular notion of equality, but also of the attitudes towards inequalities. Our attitudes are derived from the assumption that differences in achievement are due essentially to moral factors. This is well illustrated in the preceding paragraph. If an individual is born with a meagre intellectual equipment, we act as if he had committed some abominable moral outrage, and must suffer the consequences. On the other hand, the individual of superior gifts is encouraged in the belief that they are the reward of fortitude on his part, to which he has a moral right. The fact is that the first is unfortunate and the second fortunate by nature. There is no moral factor involved in either case at least in so far as the individuals themselves are concerned. We no longer think of condemning a man because he has been struck by a thunderbolt, overwhelmed by a flood, or visited by smallpox. We regard him as a fit subject for commiseration. Likewise, only in the most benighted of communities is it customary to abuse the blind, the crippled, and others suffering from physical defect or misfortune. It is time that we should endeavor to develop attitudes towards psychological traits that have now become common in the physical and physiological realms. The inheritance of a

superior mental equipment should be less a cause for pride than for thankfulness. Individual differences are a part of the plan of nature and as such they should be recognized.

There is one additional point that deserves attention in this discussion. The special treatment of the gifted child is necessarily associated with some form of educational guidance. When this guidance is uncritical, as much of it is to-day, we have additional cause for grave apprehension. The opinion is not uncommon that it is a serious waste of talent to permit an individual of superior mind to engage in the more common and humble callings. The argument, which has a certain appearance of cogency, runs something like this. Since it requires but a mediocre grade of intelligence to make a successful carpenter, no individual of superior intelligence should be permitted to enter this calling. Indeed, it is argued, it would be dangerous to allow such a thing to occur, because the individual of superior mind would not be content as a carpenter and consequently might as an agitator promote unrest and general dissatisfaction within the industry. Furthermore, the converse to the above proposition is also accepted as good doctrine, namely, that all persons intellectually gifted should be definitely prepared, by means of the higher education, for those professional and managerial occupations required by the established order in which success is conditioned on the possession of a high grade of intelligence. This notion of arranging all occupations in a graded series according to the intelligence quotient demanded for success and then guiding all individuals into the occupations that correspond to their own intelligence levels, is an attractive one and is certainly serviceable, but it has its limitations and even dangers. In its negative aspect it is sound. An individual should at least not be encouraged to enter an occupation requiring an intelligence level in all probability higher than he possesses. But that the principle should be applied in the other direction by excluding from the lower occupational levels all persons of superior intelligence is doubtful.

The point that the enthusiastic advocates of this program of guidance overlook is that the direct demands of the vocation are not the only demands made on those engaged in it. They assume that the present industrial order is fixed and that the compensation, conditions of labor, and social status of the various occupations are determined by some immutable natural law before which individuals and classes must bow. Either this, or that we are living in a non-competitive industrial order in which no group can or will promote its own welfare at the expense of others. But few indeed would hold to either of these views. We realize fully that, if the position of the more humble occupations is to be raised, if the lot of the common man is to be ameliorated, it must be done in considerable measure by those engaged in these occupations, by the common man, under devoted leadership. Consequently there is need in each calling, however humble, for a limited number of individuals of high intellectual and moral gifts who may aspire to and occupy positions of leadership within their own class and thus lead that class up into a richer and fuller life. It is folly to expect this to be accomplished entirely by individuals belonging at the time to the more favored classes, at least until social obligation is taught much more effectively than it is taught to-day in our schools. History records few examples of the emancipation of one class by another. Thus, if through a system of guidance, we should drain out of the less fortunate classes all the superior talent born to them, we would deprive them of that leadership necessary to their salvation, close the door to the general improvement of the condition of these classes, and make it possible to rivet upon them a system for their more complete exploitation.

The history of rural life in the United States gives us a splendid illustration of what to expect from the operation of this principle of guidance. Here the school, along with other agencies, has selected the more promising children and directed their attention away from the rural community towards the higher education and urban life. From

generation to generation this selective process has gone on until to-day in certain of the more long-settled regions the rural population exhibits a serious lack of that intellectual vigor and those qualities of leadership which are necessary to the development of a superior rural civilization. This continued withdrawal of the more gifted strains from any section of the population is bound to produce the same result. If our desire is to create in this country a docile, servile, obedient proletariat, surpassing in these respects anything the world has yet seen, lacking in all the virile traits and incapable of effective protest, we can do no better than promote that type of educational guidance that seeks to remove from the ranks of the less favored classes all individuals of superior gifts. To some there is nothing abhorrent about such a social order, but it would hardly find a congenial atmosphere among American traditions.

Our conclusion, then, is that special attention should be given to the gifted child, that on him particularly should society lavish its educational opportunities. The justification of this unusual extension of privilege, however, is not to be found in any superior rights to which the individual of promise is entitled, but rather in the large social values involved. The gifted individual is not sacred, although his gifts are, and so he should be taught to regard them. It is the chief function of the educational system to convert every normal child from a social liability into an asset, and the greater the gifts of the child the more necessary this is. The gifted citizen who recognizes no social obligation is much more dangerous than the ordinary criminal of mediocre or low-grade intelligence. Consequently the education of the gifted child should insure above everything else the development of a strong sense of social obligation. Otherwise such expenditure involves the misappropriation of public funds and, more than that, the actual subversion of these funds to anti-social purposes. It is particularly necessary in the complex world of to-day, cut across, as it is, by class and race divisions and violent antagonisms, to bind the individuals of talent to the service of the larger human purposes.

EDITORIALS

The Philadelphia Survey

The survey of the Philadelphia schools is a model. It was made, with the approval of Governor Sproul, by the State Department of Public Instruction, under the general direction of Doctor Thomas E. Finegan, without expense to the city, upon the ground that the standards and procedure recommended for Philadelphia would be beneficial to all the cities of the state. It has, however, proved to be more than that, and will serve as a source of enlightenment for the entire country and as an important document for students of school administration.

Philadelphia has, for a city of its wealth and general culture, been backward in school affairs. Until recently the system was managed by a board whose members seem to have been selected largely for political reasons and by political means, and was for many years controlled by a small group of elderly men—some maintain, by a single man. The superintendent was generally believed to be a puppet, with less power than the secretary of the board, as no other type of man could hope to survive. While of late a number of new members of character, intelligence, and education have been forced into the board by popular demand, and the country has been searched to secure an efficient superintendent, many of the ill effects of the past remain, and the survey has done well in clearly stating the facts and advocating reasonable reforms.

The recommendations of the survey, which we presented in last month's issue, are all in keeping with modern school administration. It is now generally conceded that the only body to represent the best wisdom of the citizenry is a lay board selected at large by the people at a special election, and that the superintendent should be given a stable tenure of office and full authority as head of the school system. His rec-

ommendations may be postponed or even reviewed at times by expert advice from outside, but they should not be rudely rejected or overridden, and his duties and prerogatives should never be usurped by the board. If such axiomatic procedure had in the past been followed by Philadelphia, the revelations concerning the stingy support, the unsanitary, unsightly, and inadequate buildings, the independent and uncoördinated high schools, the lack of kindergartens and junior high schools, the poor work in the lowest grades, and other deficiencies would not have appeared.

Happily, however, the report has, in the main, been constructive. It has pointed out many commendable features in the city system, both those in existence before the survey and those made by the school authorities as the various sections of the report have been sent in, and has shown how the remaining defects can be remedied without resort to radical measures. The report is temperate, judicial, and direct, and will prove most convincing to the friends of the Philadelphia school system. A survey has been widely discussed and agitated in the city for several years, but was always rejected, through fear of the expense or of possible damage that might be done the city by a destructive report, until the offer was made by the state through Dr. Finegan. The results have dispelled both these fears, and sadly disappointed those who expected a savage arraignment. In the words of the *Evening Ledger*, it is "a survey that has justified itself."

Teaching Citizenship

"Learn to do by doing," declared the good old bishop who so profoundly affected modern method. While this maxim of his has been gradually working its way into educational practice during the past three centuries, we have used it but little in preparing for citizenship. During the day of its chief vogue the "school city" trained children in many of the duties of self government, but it was very limited in its adoption, and at best could not touch many of those who needed the training most immediately, as the vast majority of young people

have dropped out of school before they are sixteen. Likewise, the Junior Republic, founded by Mr. William R. George, reaches only a comparatively few boys and girls, and those of an unusual type, for the most part. And our present extensive efforts toward Americanization deal mostly with adults and are often confined to textbooks and school work of rather a formal type.

Now it is proposed to anticipate citizenship by setting up "junior municipality" in as many communities of the country as possible, and to bring in all boys and girls between the ages of sixteen and twenty-one. Each officer in the regular city, borough, or village government is to be paralleled by a boy or girl elected by the junior citizens. They will carry on similar duties to those of the senior or real officers and be allowed to serve occasionally as their understudies. There will in each case be an advisory council of adults to whom the junior citizens and officials may go for assistance.

This experiment was started by Mr. George, who wished to extend his ideas and methods to a wider range of young people. He was probably the first person to realize that boys and girls do not by any process of nature suddenly develop into American citizens at the age of twenty-one any more than they are likely to become full-fledged doctors or lawyers without training. He has, accordingly, interested a committee of prominent men and women in the spread and practice of his social and civic gospel. This voluntary group of persons in charge of the movement is known as "Self-Government, Inc.," and has a regular office at 120 Broadway, New York.

The first of these junior municipalities was organized at Ithaca, New York, some six years ago. The junior citizens elected their own mayor, council, chief of police, judge, school board, and commissioners of streets and public works. These youthful officials performed their duties with striking success until our entrance into the war, when practically the whole junior government was enlisted or drafted. Since the armistice a dozen others of these communities have been

organized in northern New Jersey, southern New York, and the vicinity, and are coöperating more or less closely with the adult government. And the central committee hopes to establish at least one hundred additional junior municipalities before the close of the year.

In this way it is hoped that a large proportion of the two million young people reaching the voting age each year shall have received considerable training as junior citizens. Many of the un-American elements in our country have arrived at their hostile attitude toward the government simply because they do not understand its spirit. Having been oppressed in the foreign lands from which they came, in the name of law and order, they assume that the requirement of obedience to law means the same thing in America, and fall an easy prey to any designing person with a new social doctrine of destruction. Even worse than this are those native Americans who regard their citizenship so lightly as to refuse to take part in self government. It is not extravagant to hope that when the young people of our country who have had the benefit of participating in a junior municipality come to maturity, they will understand the real spirit of American institutions and be able to do their share in carrying on effectively a government "by the people, of the people, and for the people." While the results will not be evident for some time, they may well appear in the end.

NEWS NOTES

The Institute of Politics held its second annual session at Williams College, July 28 to August 26. The membership comprised some three hundred leaders in the field of political science, who came from twenty-six different states and a number of foreign countries. Among those enrolled are Brigadier General Harry A. Smith of the United States War College, Admiral H. P. Huse of the General Board, and a dozen other high officers of the national army and navy, as well as five college presidents and a hundred or more professors. The conference leaders included Hon. David F. Houston, late secretary of the treasury, Paul M. Warburg, financier, and Rear Admiral Austin M. Knight; and among the lecturers were Lionel Curtis, secretary of the Irish Peace Conference, Philip H. Kerr, M. P., former secretary to Prime Minister David Lloyd George, Ramond Recouly of Paris, Manoel de Oliveira Lima of Brazil, Dr. Kosef Redlich, former minister of finance for Austria, and Dr. Rikiwaro Fujisawa of Tokio.

Those favoring the admission of women into full membership in the University of Cambridge on an equality with men have now appealed to the Minister of Education. Dr. Fisher listened to the petition of the delegation sympathetically and conceded that it would be exceedingly difficult for Parliament to pass the grant of £100,000 recommended by the royal commission for Oxford and Cambridge, if the universities were not open to women. But he also pointed out the counterbalancing difficulty that would ensue from an interference with the autonomy of a university.

In December, 1920, the admission of women to full membership was rejected by a close vote, and the proposal that Girton and Newnham Colleges should be incorporated into a women's university, with all the customary rights and privileges of such an institution, was even more decisively defeated. Last October two more alternative proposals were offered, and the one allowing the degree to be granted, with further concessions, was passed. Now the women are taking a further step.

The Piedmont High School, California, has just installed an up-to-date system of inter-class communication. Each room is equipped with a "loud speaker" which is connected to a master station. By means of a special switch, broadcasted radio lectures and concerts may be reproduced in any of the classrooms at will.

Dr. Lewis M. Terman has been appointed Head of the Department of Psychology at Stanford University, a position made vacant by the retire-

ment of Professor Frank Angell, who had held it since the opening of the University in 1891.

Dean John W. Withers has called his former associate, President E. George Payne of the Harris Teachers College, St. Louis, to the new professorship of Educational Sociology in the School of Education, New York University.

The National Committee for the Prevention of Blindness has announced that the training course for teachers of sight-saving, held this year in connection with the Summer Session of Columbia University, proved so successful that it will become a permanent institution there.

Dr. Charles A. Prosser, President of Dunwoody Institute, Minneapolis, is the chairman of a committee of seventeen citizens recently appointed by the governor of Minnesota to investigate the condition of the blind being cared for by the state and the efforts being made for the prevention of blindness.

Preparations are being made to celebrate the Pasteur centenary by a great international exposition which will be opened in Strasbourg, where Pasteur began his career. This centenary increases the perennial interest in Pasteur's great biography by Vallery-Radot, and makes most timely Dr. L. Descour's *Pasteur and His Work* (Stokes) which has just been published.

At the request of State Superintendent J. L. Bond, Dr. George F. Zook, specialist in higher education, United States Bureau of Education, has made a survey of the thirteen denominational colleges of Arkansas, and the results have now been reported in Bulletin 1922, No. 7, of the Bureau. While commending the zeal with which these colleges were promoted, Dr. Zook shows that more institutions have been established than are justified by either the income available or the number of students possible. Doctor Zook has also made a report to the State Baptist Convention of Tennessee on the four denominational colleges under its control. In general, he makes clear the lack of organization in its support of higher education and the necessity for closer coördination of the curricula accredited from high schools with those of the colleges. Specific recommendations are also made in the case of each of the four colleges.

Dr. Trevor Arnett has resigned as auditor of the University of Chicago, and has accepted a secretaryship in the General Education Board. His assistant, Nathan G. Plimpton, has been elected as his successor.

A Recreation Congress will be held in Atlantic City, October 9-12, for the discussion of activities of all kinds for boys, girls, and adults in big

cities, small towns, and rural districts. This is the ninth Recreation Congress held in this country, the last one having been in 1916. The Committee in charge will be glad to hear from those interested at their New York City address, One Madison Avenue.

Dr. William A. Dunning, Lieber Professor of History and Political Science at Columbia University, died in New York on August 25. He was graduated from Columbia in 1881, and, except for a few years at Adelphi College, his entire teaching career was spent in the service of his *alma mater*.

Dr. Samuel Hamilton, for more than a generation superintendent of schools for Allegheny County, Pennsylvania, died suddenly on the grounds of the Chautauqua institution during the summer. While only sixty-six, Doctor Hamilton had probably served for a longer term than any other county superintendent in the country, and retired last spring to the great regret of hundreds of educators. At the time of his retirement, the EDUCATIONAL REVIEW published his portrait and a brief appreciation.

The survey of state finances in Pennsylvania being made by the committee appointed for that purpose by Hon. Gifford Pinchot, Republican candidate for Governor, has now turned to an investigation of educational costs. The general chairman of the Pinchot committee is Professor Clyde L. King of the University of Pennsylvania, but the work on educational expenditures will be carried on by Professors Harlan Updegraff and LeRoy A. King of the same institution. In their investigation Doctors Updegraff and King are consulting with a committee of leading Pennsylvania educators and citizens. This committee consists of two school superintendents from large cities, two superintendents from small cities, one college president, two county superintendents, and several citizens. They have also the assistance of special experts, including Dr. William C. Bagley of Teachers College, Columbia University. The investigation will include an analysis of the subsidy policy to local schools in Pennsylvania as compared with subsidy policies in other states; a study of the appropriations to higher educational institutions in Pennsylvania, including normal schools; and a survey of the general spending policies of the State Department of Education.

Dr. Wallace B. Fleming, president of the West Virginia Wesleyan College for the past seven years, has accepted the presidency of Baker University, Kansas.

An initiative measure for an amendment to the compulsory section of the Oregon school law, which would prohibit all private schools in the state, will be submitted to the voters at the election in November. The amendment would provide that every child between the ages of eight and

sixteen must attend a *public* school, and, in case he fails to do so, the parent or guardian will be held guilty of a misdemeanor. Exceptions may be allowed for those children physically unable to attend, those who have completed the eighth grade, those receiving instruction privately, and those living a mile and a half to three miles from school, according to their ages; but in all such cases the children must report every three months for examination by a public school official. The act would take effect September 1, 1926.

The Board of Education of Syracuse, N. Y., hopes to introduce the reading of the Bible into the public schools of the city, beginning in November. After much discussion it has adopted resolutions, declaring a knowledge of the Bible essential to education, and requesting the Superintendent of Schools, Dr. Percy M. Hughes, to form a committee, composed of two Protestant ministers, two Catholic priests, and two Jewish rabbis, to select the portions of the Bible that should be read in the schools. The passages are to be read, without interpretation, at the morning exercises.

Dr. Howard G. Burdge has been elected Principal of the State Normal School at Fredonia, New York. He served as principal of the Chamberlain Institute at Randolph, and of the High School at Ellicottville, and for twelve years was Superintendent of Schools at Wellsville, New York. During the war he was chief educational adviser of the Second Army (Expeditionary), and from 1918 to 1921 was Director of the Research and Vocational Training Bureau of the New York State Military Commission. During the past year he has served as the expert on taxation for the Educational Inquiry on Finance under the auspices of the National Council on Education.

Superintendent William D. Landis of Northampton, Pennsylvania, has been elected supervisor of teacher training at the State Normal School at Kutztown.

Dr. Arthur A. Hamerschlag has resigned as president of the Carnegie Institute of Technology. Dr. Thomas S. Baker, headmaster of the Jacob Tome Institute from 1909 to 1919 and secretary of the Carnegie Institute for the past three years, has been appointed acting president.

At the conference on health education held at Lake Mohonk this summer, the committee on teacher training presented a report of a plan of health education and recommendations for teachers in training. It included the outline of a plan for the kindergarten and first four grades, the fifth and sixth grades, the junior and senior high schools, and teachers in training.

A questionnaire formulated by the United States Bureau of Education has revealed the fact that the number of colleges and universities allowing

entrance and college credits in the subject of music is increasing. Hence the high-school student who wishes to specialize in music no longer faces the fact that his chosen subject will not count toward a college degree, and there are now one hundred and ninety-four colleges that allow entrance credit in some form of music.

In California the State Federation of Music Clubs has inaugurated a drive to secure music records for the use of rural schools. It is planned to place the records that are obtained with the county librarians for circulation among the rural districts requiring them. In no part of the state could the Federation have undertaken to serve the cause of music education better than in the rural districts. Many of the country schools are located in lonely spots throughout the great commonwealth, and little is offered there for recreation, the training of the ear, or the development of appreciation.

The College of the Pacific, Methodist Episcopal, has raised the million and one half for endowment and new buildings at which it aimed. The institution will be changed from its location in San José to the city of Stockton, California, which raised $600,000 of the amount sought and donated a site of forty acres on the outskirts of the city. In 1896 Napa College, which was located at Napa, was merged in this College at San José.

A new increase in the scale of salaries became available for the teachers of Chicago this fall. The minimum annual salary of the elementary teachers will hereafter be $1,500, instead of $1,200, and the maximum will become $2,500. High-school teachers will receive a mimimum of $2,000, and a maximum of $3,800. Principals in the elementary schools will now be paid $3,000 as a minimum and $4,800 as a maximum; while high-school principals will have as a minimum salary $4,300 and as a maximum $5,700.

Princeton University has been granted a fund of $60,000 in instalments of $12,000 per annum for five years by John D. Rockefeller, Jr., for the purpose of establishing a Library on Industrial Relations. The director of this library is to be Dr. Robert F. Foerster, who was for twelve years instructor in Social Ethics at Harvard University.

The Blake Estate in New Haven, valued at $70,000, has been secured by Yale University, and will be used for dormitories for students of the Sheffield Scientific School.

Northwestern University has established a school for Commerce Secretaries. The course, which has been formulated with the aid of a committee from chambers of commerce, has arranged for regular academic

work in the morning and practice in chamber of commerce methods in the afternoon.

Dr. George R. Sommerfeld, professor of Mathematical Physics, University of Munich, is holding the Karl Schurz Memorial professorship at the University of Wisconsin during the first semester this year.

A review of the activities of the Rockefeller Foundation in 1921, written by its president, George E. Vincent, has recently been published. The things done by the Foundation directly and by its departmental agencies—the International Health Board, the China Medical Board, and the Division of Medical Education—are given in the form of a summary:

The Foundation continued a quarter-million annual appropriation to the School of Hygiene and Public Health of Johns Hopkins University; pledged two millions to Harvard for a school of health; contributed to public health training in Czechoslovakia, Brazil, and the United States; aided the Pasteur Institute of Paris to recruit and train personnel; promoted the cause of nurse training in America and Europe; underwrote an experimental pay clinic in the Cornell Medical School; formally opened a complete modern medical school and hospital in Peking; assisted twenty-five other medical centers in China; promised a million dollars for the medical school of Columbia University; contracted to appropriate three and one-half millions for the rebuilding and reorganization of the medical school and hospital of the Free University of Brussels; made surveys of medical schools in Japan, China, the Philippines, Indo-China, Straits Settlements, Siam, India, Syria, and Turkey; supplied American and British medical journals to one hundred and twelve medical libraries on the continent; supplemented the laboratory equipment and supplies of five medical schools in Central Europe; defrayed the expenses of commissions from Great Britain, Belgium, Serbia, and Brazil; provided 157 fellowships in hygiene, medicine, physics, and chemistry, to representatives of eighteen countries; continued a campaign against yellow fever in Mexico, Central and South America; prosecuted demonstrations in the control of malaria in ten states; coöperated in hookworm work in nineteen governmental areas; participated in rural health demonstrations in seventy-seven American counties and in Brazil; neared the goal of transferring to French agencies an anti-tuberculosis organization in France; and provided experts in medical education and public health for counsel and surveys in many parts of the world, and rendered sundry minor services to governments and voluntary societies.

During the year the Foundation's own representatives have visited many countries, while at its invitation and as its guests various individuals and groups visited the United States and Great Britain for purposes of observation and study. One hundred and fifty-seven individuals during 1921 held fellowships, funds for which were directly or indirectly supplied by the Rockefeller Foundation. These fellowships fell into five groups: (1) fifty-four fellowships in public health under the International Health Board, (2) fifty-two fellowships administered by the China Medical Board, (3) sixteen fellowships in medical education, (4) thirty-four research fellowships in physics and chemistry supervised by a special committee of the National Research Council, and (5) one member of the International Health Board staff who, on what is known as "study leave," was engaged in special study.

The National Park Service of the Department of the Interior has been turning its attention toward the educational sides of its work. It has just issued a bulletin on *The Story of Yosemite Valley* by F.W. Matthes of the United States Geological Survey for the use of schools, study clubs, and other educational agencies. The bulletin is intended to be the first of a series on the making of American scenery as exemplified by the national parks.

Dr. Florence E. Bamberger, Associate Professor of Education in Johns Hopkins University, has just completed an investigation of the effect of the physical make-up of a book upon children's selection. This pioneer study was made through a series of experiments with three hundred and fifty-eight children in the primary grades, and it reveals most interesting data concerning the tastes of children with regard to books, titles, and pictures. The results of the investigation have been published in the *Johns Hopkins Studies in Education* under the editorship of Professor Edward F. Buchner.

Dr. James Harvey Robinson seems to be blazing new trails of late. For more than a generation he has been known as a professor of History and a fascinating writer upon historical subjects. More recently he has been turning his attention to psychology and has produced a work on *Mind in the Making* (Harpers) that has attracted considerable attention from many circles of readers. Now he is advocating a new form of education, which will cultivate both the scientific and humanistic frame of mind of the young. His ideas were presented in an address before a meeting of the American Association for the Advancement of Science at Salt Lake City. Such an educational system, he said, would avoid the frequent discussions that have lately been waged over evolution. "We need some new organized effort to bring together in an imaginative and novel manner the prevailing and sometimes conflicting knowledge of the material world, its fundamental nature as it is coming to be understood in the light of the astonishing new theories of matter itself; the general story of life, with some attention to the great classes of living creatures; the discoveries in regard to man's nature and functioning; and the history of his achievements and perplexities."

A foundation has been recently organized by Mr. William E. Harmon of New York City to help students make their way through college by means of a loan fund. The foundation is making a systematic study of loans to college students, and is collecting information as to experiences and results, which it will be glad to furnish to all interested, when it has been gathered. It has also its own plan for supplementing college loans and keeping the financial relationship with students on a scientific basis. It strives to overcome the loss of health and sacrifice of the fullest opportunities that may result from a student's endeavoring to earn his living at the same time that he is studying, but the loan is made as a business proposition, with character as the collateral and all idea of charity is dismissed.

Clients of the foundation are even expected, in paying back, to assume a part of the liabilities caused by those loans whose repayment has lapsed. A similar project has been most successful in several European countries.

The week of October 8–14 has been tentatively fixed by the Highway Education Board, Washington, D. C., as the "National Safety Week." This board is still receiving suggestions for the proposed safety campaign, and it is hoped that those in charge of local campaigns will arrange their dates to conform with the observance of the "Seven Days for Safety." Suggestions received to date include a national essay contest among pupils of the fifth to eighth grades. The National Automobile Chamber of Commerce has offered to set aside approximately six thousand dollars in prizes for the best safety essays and lessons if sufficient interest is indicated.

The close coöperation between the American Museum of Natural History and the public schools and other educational institutions is emphasized by George H. Sherwood, Curator in charge of the Museum's Department of Public Education, in a report in connection with the general report of the Museum for the year 1921.

During 1921, 1,247,515 children, public school pupils, studied the circulating nature study collections, compared with 914,634 the previous year. There were 162 lectures to school children, against 116 in 1920. The total attendance at all lectures, including lectures to school children, was 93,459, against 88,873 in 1920.

The lending of lantern slides, an important feature of the department's work, also increased, 182 schools being served, against 154 in the previous year. The number of such loans was 3,187, against 1,933 in 1920. The number of slides circulated in schools increased from 116,342 in 1920 to 175,272 in 1921, and the total number of slides lent, including those to public schools, rose from 138,133 in 1920 to 209,451 in 1921.

New departures in the circulating collections of natural history specimens are some twenty small habitat groups of birds and other animals, which will be lent to schools to show the animals in their natural surroundings, utilizing accessories as well as a painted background, the whole inclosed in glass. One of these cases has been installed in the New York Training School for Teachers for trial in the Model School.

The special food exhibits prepared by the Museum's Department of Public Education, in conjunction with the Department of Public Health of the institution, are said to have fully proved their value. Food models, wooden percentage blocks, charts, and handbooks comprise the exhibits. Designed primarily for domestic science classes, they have come to be used in general health work among pupils as well as in the extension work of the Parent and Teachers' Association.

Twice a year, just preceding each commencement day, a reception is given at the Museum by its Department of Public Education to the graduating classes of the New York Training School for Teachers and the Maxwell (Brooklyn) Training School for Teachers. Nearly every member of

these classes goes directly into the school system of Greater New York. The student teachers, just about to enter the schools, are thus brought into touch with the Museum and learn how easily coöperation may be established.

At a recent conference of the Commission on the Coördination of Research Agencies, a working program for the newly established Research Department of the National Education Association was suggested. In order to determine the educational problems that are of major importance, the director of this department has been sending out a questionnaire to all members of the Association asking for suggestions as to educational subjects needing investigation.

The New York Society for the Experimental Study of Education has issued an appeal for a foundation to provide financial support and to encourage various forms of educational research. This organization would be composed of a group of prominent and influential citizens of New York City, whose functions would be to receive and disburse funds for scientific studies in education. It would serve to focus the attention of public-spirited citizens upon the need of researches in education, and would in time have a most potent influence upon the improvement of education in New York City.

The Society has now been in existence for three years, and has grown until it has over eight hundred members, including practically all of those engaged in educational research in New York City. It is organized into twenty-eight sections, embracing almost every field of classroom work in elementary and secondary education. It is thus well fitted to foster educational research, and large benefactors interested in the progress of education would be well justified in furnishing the Society with the funds necessary to carry on its investigations. The Foundation would, of course, be an independent organization and should be free to interest itself in all forms of research in education, but coöperation with the Society would naturally receive primary consideration.

A number of agencies beside the educational authorities seem to be concerned about the country schools. The United States Department of Agriculture, through its Division of Agricultural Instruction, in coöperation with the state departments of education and state colleges of agriculture, has recently been preparing outline courses in agriculture for these rural institutions. These courses are planned so that the students may apply what they learn to the best systems of farming in their district. Courses for Ohio, Wisconsin, Maryland, Virginia, Arkansas, North Carolina, and Oklahoma have already been published.

The problems naturally differ with the state, and the courses have had to be worked out after careful surveys of conditions, crops, and other factors are made. As they have to be embodied in a manual for teachers of elementary agriculture in the common schools, they are worked out

coöperatively. Members of the staff of each State College of Agriculture constitute the authority for the agricultural information in the manual, and members of the State Department of Education are responsible for the pedagogical arrangement and the application of the lessons to school conditions. Each manual, on its completion, is published by the state using it and becomes that state's exclusive property.

At the meeting of the National Federation of Business and Professional Women's Clubs, held in Chattanooga this summer, it was voted to investigate the promotion of the best education of women for business and to enlarge the education committee and associate with it an advisory committee composed of seventeen men and women prominent in business, education, and economic research.

The Chinese Republic has appointed Dr. Paul S. Reinsch, sometime professor of Political Science, University of Wisconsin, and later United States Minister to China, to be a special adviser.

The National Association of Book Publishers desires to bring to the attention of teachers the fact that multigraphing, or reproducing in any other way for class distribution, paragraphs, pages, or chapters from copyrighted books is an infringement on the copyright of these books, and a grave legal wrong to the authors and publishers. This practice has increased to the extent of menacing new authorship and publishing enterprise. Reprinting by any method from a copyrighted book should be done only upon written permission of the holder of the copyright.

Mrs. Adelina Otero-Warren, superintendent of schools for Santa Fé County for four years, received the republican nomination for Congress at the convention held in Albuquerque, Mew Mexico, on September 9. She is chairman of the State Welfare Board and of the Public Welfare Department of the New Mexico Federation of Women's Clubs.

Dr. Alexander Smith, professor of Chemistry at Columbia University from 1911 to 1921, died at his home in Edinburgh, Scotland, on September 9. He was born in Edinburgh in 1865, but spent the greater part of his life in the United States. He had been a professor of Chemistry at Wabash College and the University of Chicago, as well as at Columbia, and was the author of a number of laboratory manuals, and joint author of a book on *The Teaching of Chemistry and Physics*.

Dr. Arthur Griswold Crane has been elected president of the University of Wyoming in the Place of Dr. Aven Nelson, who has served in that capacity for the past five years and who resigned in June to return to his special field of Botany.

CORRESPONDENCE

Note.—It is hoped that in this new department our readers will feel free to express themselves with the utmost frankness both concerning the articles and the policies of the EDUCATIONAL REVIEW and concerning educational problems of all sorts and in every state and country. No restriction is placed upon the sentiments of the writers, but all contributions must be signed with the real name of the author. A most profitable set of discussions is expected in the course of the year.

To the Editor.

I noted with interest in the September number of the REVIEW Doctor Geer's criticism of the Regents' Examinations [New York State] as forcing one to teach high-school subjects in a way that he considered far from satisfactory. The complaint is an old one, but, without criticizing Doctor Geer, may I state my experience as a high-school principal of many years standing?

In my judgment the best way of getting the best results from the pupils in Regents' Examinations is to teach the subject without any regard to Regents' Examinations. I said to teach the subject, meaning to teach the pupils the subject.

If the teacher prepares each lesson carefully in accordance with the monthly, weekly, and daily divisions of the course of study, and feels that in each lesson the pupils must succeed, the best known preparation for the examination at any time is used. It is necessary, however, that the teacher should in every case realize that the failure of any pupil for a lesson or a term, is the teacher's failure. This is true even if the teacher has done everything humanly possible to determine the success of the pupil. After the last ounce of effort has been put forth, the fact remains that the teacher has failed if the pupil has failed.

The amber may be perfect, but, if there is a fly in it, the fact of the fly remains, no matter how perfect otherwise the amber may be. If a white escutcheon has a blot upon it, the blot remains, no matter how it came. Likewise, if the pupil fails, it is the failure of the teacher, even if the limit of good teaching has been reached. I would go further and say that the lack of success of any teacher is the failure of the head of the department. The failure of any head of department is the failure of the principal. In short, it is my belief that the failure of any one pupil in any class is the failure of the teacher, of the head of department, and of the principal. This may appear to be a council of perfection, but, as a matter of fact to the extent in each that this feeling exists, the success of a pupil, of a teacher, of a head of department, and of a principal depend.

If the work of each day, each week, each month, is thus carried on, success in any kind of examination is assured. In the last month of the term it is wise to give a review of the work of the term. This is both necessary and desirable. Unquestionably, in this review, it is perfectly proper to take up points which good sense tells would be likely to occur

on the examination paper. In the Regents' Examinations, given throughout the state, it is necessary that the questions must be largely alike from year to year, and that the lines on which the questions are made must necessarily be repeated from time to time. It is perfectly proper for a teacher to note this. There is no objection for the teacher to announce such questions to the class as ones that will occur in Regents' Examinations. You will note that questions in examinations are based on work taught during the term. If the daily lesson is taught as it should be, success in the examinations is sure to follow.

I fail to see why Doctor Geer should have found preparation for the Regents' Examinations incompatible with teaching his subject in the best possible way. In my opinion he should have allowed the examinations to take care of themselves. This would have been the case, had the subjects been presented with maximum efficiency.

MICHAEL H. LUCY.

PRINCIPAL, EASTERN DISTRICT HIGH SCHOOL,
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REVIEWS

The American University. —By E. R. HOLME. Angus & Robertson, Ltd. 1920. 242 p.

Mr. Holme is a Professor of English in the University of Sydney. During the war he was Chairman of the Administration Committee of the Australian Universities, a section of the Educational Service of the Australian Imperial Force. After the war he was delegated to return to Australia by way of the United States in order that he might make a preliminary survey of American universities as a basis for a later detailed study to be made for the benefit of Australia. He gathered his material during his stay in America from December, 1919, to the end of February, 1920.

This volume, published for the University of Sydney, includes the general part of Mr. Holme's preliminary report. It outlines answers to Australian inquiries about American universities under certain heads prescribed in 1919 by the Committee of Australian Universities. The Chapter Headings give a clear idea of the subject matter: University Government and Administration; Federal Aid and University Education; State Support of Universities; Matriculation Requirements; Graduate Work; The Dormitory; University Extension; University and Community. Under these headings and with repeated declaration of the hasty and preliminary and discursive nature of his work, the author sets forth representative university life of American universities for Australian readers.

At no time dogmatic, Mr. Holme is frank in his adverse criticisms of American universities. Such leading criticisms are directed against the autocracy of their presidents, the "too much administrative machinery" (pp. 36–51), the wasteful expenditure through unnecessary duplication of special lines of work (page 84), and what he regards as the essentially

undergraduate character of their freshman and sophomore courses (pp. 88 and 106 to 116).

Mr. Holme is just as frank in stating his favorable impressions. While he gives as his general conclusion "To imitate the American university is both unworthy and impossible for Australia. . . . All that Australia can worthily do is to develop its own type of university upon the British tradition" (pp. 208–209), his final chapter is a summarization of American university precedents "of evident value" for Australia. As such precedents he lists (pp. 209–242): (1) the dormitory life; (2) the more developed administrative machinery; (3) the advantages of Federal aid; (4) the excellence of the graduate schools; (5) the patriotic pride taken in American universities by the citizenry generally and especially by their alumni.

This Australian study adds another to those reviews of American universities by distinguished visitors which help Americans to see themselves, in university terms, as others see them. It is a useful book for all readers interested in the development of American university life.

WALTER E. CLARK.

UNIVERSITY OF NEVADA.

Essays on Modern Novelists.—By WILLIAM LYON PHELPS. The Macmillan Company. 1921. 293 p.

This is a reprint of the collection of essays originally published in book form in 1910. The first impression the book makes, on re-reading its interesting and at times brilliant criticisms, is the ever changing meaning of the word "modern." We are sure that if Professor Phelps were issuing such a book to-day, his choice of subjects would differ, both in omission and inclusion, from the list as here given. DeMorgan, Bjornson, Sienkiewicz, and Blackmore would probably disappear, and those who could take their places would more than fill the volume. For, to mention only one, the greatest of "modern novelists," Mrs. Wharton, is not here, although *The House of Mirth* was published in 1905.

Professor Phelps gives sound and discriminating criticism on Hardy, Howells, Mark Twain, Stevenson, Kipling, and Sudermann. He does not, we think, appreciate Mrs. Humphry Ward's portrayal of the atmosphere in which she places her characters, but he puts his finger on her weaknesses. He rightly protests against the Continental criticism of English and American novels on account of their reticence, for it is not a question of morality only, it is a question of the proper proportions in which one draws life. An interesting appendix contains his plea for the study of contemporary literature and an account of his experiences when he began to give a course on "The Modern Novel" at Yale about 1896. We remember the surprise we felt at that time, when this course was hailed as a great novelty, for we had taken a course in modern fiction at Pennsylvania with Professor Schelling several years before; but this essay, read now, proves again how fast time flies. Courses in modern literature are given everywhere now, and Professor Phelps can rightly be congratulated

on being one of the pioneers in bringing trained academic judgment where it is vitally needed, that is, to the reading public who have to be told constantly what they should or should not read.

Arthur Hobson Quinn.

University of Pennsylvania.

A Dramatic Reader, Books I, II, and III.—By A. R. Headland and H. A. Treble. Oxford University Press, American Branch. 1921. Book I, 112 p. Book II, 112 p. Book III, 175 p.

At first glance one might conclude that these attractively bound books do not contain enough material to justify the division into three parts. Examination indicates that each part is adequate for its purpose, for the pages run to one hundred and twelve, one hundred and twelve, and one hundred and seventy-five; the numbers of selections are ten, sixteen, and twenty-five. The first book contains the longest selections, but the second and third offer material of much more literary value and dramatic effect.

Teachers interested in dramatic presentation of usual and unusual literary and dramatic masterpieces should be able to place these volumes in their proper years. As our American schools are graded, these three books do not follow in immediate succession; there is a wide gap between *The Sleeping Beauty* of Book I and any of the selections from standard nóvels in Book II, and as wide a gap between the adaptations of the second, and the strictly dramatic form of the selections in the third. This last volume contains scenes from not only the dramatic "classics" but from such contemporary literature as *The Gods of the Mountains*, *You Never Can Tell*, and *The Typhoon*.

Few collections cover so many different varieties of "scenes" and so wide a range of maturity. To many teachers, accustomed to the preparation of American textbooks with every aid supplied to piece out the imperfection of hundreds of classroom workers, the strangest feature of this series is the total absence of "Teacher Aids." These editors believe that before instructors attempt a thing they should be prepared to carry it out successfully. They little know one of the conditions which obtains in our educational systems.

Clarence Stratton.

Director of English in High Schools,
Cleveland, Ohio.

A Book of Verse from Langland to Kipling.—Compiled by J. C. Smith. Oxford University Press, American Branch. 1921. 298 p.

This is described on the title-page and explained in the preface as being "a supplement to the *Golden Treasury*, and is consequently restricted in its field of choice. The compiler does not, however, restrict himself, as one might expect, to lyric poetry, nor—as one might alternatively infer—

to non-lyric. Swinburne is represented by the two famous choruses from "Atalanta" and "Erechtheus," Kipling by "Ford o' Kabul River" only, and Meredith only by the "Ballad of Past Meridian"; "The Bridge of Sighs" is here, and Tennyson's "Lotus-Eaters," and Thompson's "Hound of Heaven." On the other hand, Jonson is represented only by his lines on Shakespeare, Dryden by excerpts from "Absalom and Achitophel," and Coleridge by the first part of "Christabel." In fact it is hard to see on what principle either of inclusion or exclusion (except in relation to Palgrave's work) the editor has proceeded. Forty poets are represented. Barbour, Henryson, and Dunbar are chosen, each in brief and not very significant excerpts, to stand for early Scottish poetry; Langland is represented by "Bell-the-Cat," and Chaucer by the "Pardoner's Tale." The selections from Milton, Scott, and Rossetti seem peculiarly inadequate. One wonders why Marlowe, Donne, Clough are omitted and Emily Brontë included; why Swift is omitted and Thackeray included. But of course every anthologist must follow the leadings of his own taste and judgment. It is hard to see what purpose the collection can serve as a textbook for American schools; but the occasional reader will be glad to have, in one cheap and neatly printed volume, "The Nut-Brown Maid," Cowper's "On My Mother's Picture," Arnold's "Thyrsis," and Francis Thompson's ode, along with more universal favorites; and the American will be pleased to find Emerson and Whitman included—though not at their highest pitch.

H. M. Belden.

University of Missouri.

Cowper. Poetry and Prose.—With an Introduction and Notes by Humphrey S. Milford. Oxford University Press, American Branch. 1921. 196 p.
Burke, Selections.—With an Introduction and Notes by A. M. D. Hughes. Oxford University Press, American Branch, 1921. 192 p.
Charles Lamb. Prose and Poetry.—With an Introduction by George Gordon, and Notes. Oxford University Press, American Branch. 1921. 216 p.
Wordsworth. Poetry and Prose.—With an introduction by David Nichol Smith, and Notes. Oxford University Press, American Branch. 1921. 212 p.

These are four numbers of a series planned by the Oxford University Press under the general editorship of Mr. Smith and Mr. Hughes. The distinctive feature of the series is that to the selections in each case are prefixed excerpts, more or less copious, from the judgments of famous critics upon the authors presented: from Hazlitt for all four of the numbers here reviewed; from De Quincey for Burke, Lamb, and Wordsworth; from Bagehot for Cowper; from Coleridge, of course, for Wordsworth; and from Moore, Macaulay, Arnold, and others for Burke. "The several Essays," says the editorial note prefixed, "explain and correct each other, and they explain and are explained by the specimens." There is also a brief editorial introduction to each volume, a convenient chronological table, and notes.

The plan has decided merits, and is executed on the whole with success. Most successfully for Wordsworth and Lamb; not so happily for Cowper;

and least happily for Burke. For American students at least—notwithstanding the long-established use of the speech on Conciliation as a high-school text—a more definite and coherent account of English politics in Burke's time is needed than this method provides.

The practice, apparently unavoidable in our present educational system, of studying literature by "extracts," elegant or merely illustrative, fits some authors better than it does others. It is quite satisfactory for an essayist like Lamb; it has its advantages for as uneven a poet as Wordsworth; and it may be followed without serious loss in the case of a discursive poet like Cowper. But for a political thinker and a careful structural artist like Burke its result is a vexatious fragmentariness and a sense of frustration. The mature student who already knows his Burke thoroughly will enjoy the purple patches selected by Mr. Hughes; but to the schoolboy they will, I fear, be uninteresting because unintelligible.

H. M. Belden.

Elementary Geography.—By Frank M. McMurry and A. E. Parkins. 322 p.
Advanced Geography.—By Frank M. McMurry and A. E. Parkins. 501 p.
The Macmillan Company. 1921.

The purpose of present-day geography teaching is to impart a working knowledge of the principles of the subject; to give pupils opportunities to study geographic relationships; and to understand and to work with geographic materials in order that they may learn those principles and facts and cultivate those which are of sufficient significance to be related to their physical and social environments.

It is now considered essential that geography present facts which are vital to the subject as a study of causal relations between physical environment and man—how men have learned to control the forces of nature and to satisfy many wants and needs thereby, and how, through coöperative achievement, human life is being made much happier. Geography is, therefore, now considered as being made up of significant principles which give to pupils a knowledge of those world interrelationships which is so necessary to one who desires to keep abreast of the times, to understand current events, to realize the problems of industry and commerce, even to read with understanding.

Since the character of the course of study in geography is largely determined by the textbooks used, it is essential that these be selected with the idea in mind that they will furnish the pupils with these significant principles. McMurry and Parkins, in a two-book series for the grades, *Elementary Geography*, and *Advanced Geography*, have supplied these in a most convincing manner.

In the prefaces of the books, the authors make unusual promises. As one turns the pages of the texts, he finds these promises fulfilled. In presenting the geography of continents, countries, and sections of countries, the most significant factors of geographic control are emphasized at the very beginning of each discussion. Density of population, the effect

of isolation, the effect of geographical conditions upon government, education, and other phases of civilization—these influences are attractively and effectively set forth. The problem method is paramount throughout.

The elementary book deals with questions which are interesting to young children: man's responses to the physical conditions and life which surround him. The type method is handled skilfully to assist in fixing effective habits of study.

In the advanced book, the nature of the problems is changed to meet the needs of the industrial and commercial organization of subject-matter. Descriptions, questions, problems of human interest are profuse. The differences among the peoples of the world in dress, appearance, manners, ideas, ways of doing business, etc., which arise as a result of geographic surroundings, are properly emphasized.

In both these books teachers are safe to assume that the necessary minimal essentials of geography are given. Of special benefit to teachers are the problems for independent study, reliable reference material, and sound principles for teaching the subject. Decided flexibility is apparent in that suggestions for study are found at the end of each chapter, thereby allowing for the varying abilities of children.

The wise use of these textbooks will undoubtedly lead those who study them to an adequate appreciation of the true meaning of geography, and will surely enable them to participate more effectively in democratic society both in and out of school.

E. Ehrlich Smith.

Richmond, Virginia.

Psychological and Educational Tests in the Public Schools of Winchester, Virginia.—By W. F. Dearborn and Alexander Inglis. University of Virginia Record. Vol. VI, No. 6. 1922. 54 p.

Four noteworthy points impress the reader of this official report to the City School Board and the Handley Board of Trustees on the mental achievements and capacities of the school children of the city of Winchester: First, a method of study in essential details is given which could be followed with profit by any other city where it is evident that pupils ought to be reclassified for instruction purposes. Second, accurate information concerning the mental achievements and capacities of each individual pupil is an essential part of a rational basis for the classification of pupils. Third, criticisms concerning the efficiency of a school system in teaching the various school subjects are valid only when pupils have been taught in groups, the basis of which classification was all the information attainable about each pupil.

Fourth, pupils graded for instruction purposes on the basis of traditional standards alone, reveal indefensible variations in what they have done and could do in mastering the work of the school.

The study had its inception in a conference of local school officials, "called to consider ways and means of conducting an educational survey of school conditions in Winchester in order that a comprehensive and

scientific basis of improvement might be established." The investigation was planned by the authors named above and the "joint coöperation of the University of Virginia, the Virginia State Department of Education, and the officers and staff of the Public Schools of the City of Winchester." The report is devoted mainly to the "Conditions Disclosed" under the headings: The Chronological Age of Pupils; Conditions Shown by Group Psychological Tests; Conditions Shown by the Individual Psychological Tests; Conditions Shown by Tests in Reading and Arithmetic; Reliability of Teachers' Judgments. The tabulation of the original data is given in full so that the reader may check on the descriptive matter and see a valid reason for every conclusion and recommendation.

To the lay reader or inexperienced investigator of educational conditions the results given in this monograph may seem astounding. Similar results, however, have been found in every city where the conditions have been investigated as thoroughly as they were in Winchester. This particular study is unique in showing that a thorough investigation is possible at a very small outlay of time, energy, and cost, if the work is carefully planned in the beginning and carried out under the coöperation of such a combination of school workers as took part in this study. The Bureau of Extension of the University of Virginia has performed an educational service in publishing and distributing this report.

Sturgiss Brown Davis.

University of Pittsburgh.

Modern Business Arithmetic. Complete Course Revised.—By Harry A. Finney and Joseph Clifton Brown. Henry Holt and Company. 1922. 485 p.

The authors have made a comprehensive study of the topics of business practice and procedure, and, after a wise selection, have constructed a text that reflects to a creditable degree the modern methods and use of arithmetic in the business world. The treatment indicates an appreciation of the needs of the business house and a thorough knowledge of the practical and useful phases of the subject. The text gives an impression of strength and variety even in the most formal of the exercises.

There is little waste effort, and the development is so logical and natural that the pupil cannot fail to sense the relation of the different topics and the practical value of the material used. The "bookish" flavor of the old-line text is missing to a refreshing degree, and the business atmosphere is prevalent throughout. Modern tendencies and methods of procedure are effectively illustrated by examples taken from original transactions. The importance of mental and oral calculation is shown by the frequent exercises given to strengthen the student in handling figures without the use of pencil and paper.

The arrangement of the topics is progressive, and the grouping is such as to commend itself to the teacher who appreciates the value of economy in assignments given the pupils. The units on Maps, Drawings, and Graphs, and the units under Trade Activities and Business Expenses are

especially worthy of note. The revised edition brings all the material strictly up-to-date, and justifies the authors in their opinion that they have made a worth-while contribution to the literature of the business school. Indeed, the text can be classed with the best of the recent publications on this subject.

CHARLES HART.

EASTERN HIGH SCHOOL,
WASHINGTON, D. C.

Practical Business Arithmetic.—By HELEN KIGGEN. The Macmillan Company. 1922. 404 p.

The book is intended especially for the use of teachers and pupils of continuation schools, and for schools offering courses in dressmaking, millinery, and domestic science. After a treatment of the fundamental principles, the author demonstrates, through the use of material gathered from practical sources, the value of arithmetic as a working instrument. Many of the old familiar topics common to the so-called complete arithmetics are missing, and their place is taken by exercises that emphasize the relation of the classroom instruction to the workshop, the store, the factory, and the business house.

There is nothing new or startling in the development of the principles, and much of the drill work is along the usual conventional lines. The sets of questions given at the beginning of each chapter form an important feature and arouse an interest in the work that follows. The most effective treatment is given those topics which bear most directly on vocations and trades, the chapters on Thrift, Graphs, and Mathematics of the Trades standing out perhaps as the best of the book.

The material is well adapted to the needs of pupils pursuing prevocational, trade, domestic art, domestic science, and salesmanship courses. It is to these groups that the book makes its greatest appeal.

CHARLES HART.

Progressive Problems in Bookkeeping and Accountancy.—By WILLIAM R. HAYWARD and ISAAC PRICE. The Macmillan Company. 1922. 149 p.

It is easy for a teacher of bookkeeping to permit each class hour to become a laboratory period, with the students solving the big problem usually included in the textbook. In such instances the student is guided by the text and the teacher becomes a mere reader of reports required by the problem. Class instruction and written and oral quizzing are just as essential for a class in bookkeeping as in any other subject.

Progressive Problems in Bookkeeping and Accountancy is an evidence that teachers realize the need for properly arranged and adequate quiz material. This book supplies 149 pages of carefully worded and graded questions, problems, and short exercises in bookkeeping. It is stated in the preface that it is the result of many years of work not only in teaching

the subject, but of actual contact with business bookkeeping and supervision of the work of other teachers. This can readily be appreciate The exercises are clearly the result of years of accumulation, and undoub edly have survived the test of classroom use.

This book should be of great assistance to the teacher of elementary bookkeeping in the secondary schools. The contents is carefully arranged, so that, as claimed in the preface, the book can readily be used for assignments to supplement any standard text.

GEORGE A. MACFARLAND

UNIVERSITY OF PENNSYLVANIA.

The Science of Education, Vol. I.—By OTTO WILLMANN. Translated by FELIX M. KIRSCH. Archabbey Press. 1921. 351 p.

This work is Volume I of an "authorized translation from the fourth German edition." The title will mislead many. The reviewer does not know the original work and accordingly is ignorant as to whether the second volume will any better justify the title; but certainly the volume at hand does not conform to what is now understood in this country by the "science of education."

The purpose of issuing this translation is perhaps sufficiently indicated in the preface. Most will judge this purpose as distinctly reactionary. The work offers to supply "the guiding principles of which American education stands in sore need." This guide is to be found in the history of education. "Whatever has stood the test of the ages, bids fair to prove of value in the future also. The present volume undertakes to ascertain from the history of education, what is the basis of our culture and civilization and what must, consequently, ever remain the essence of our courses of study."

The translator would not have us hastily conclude that Doctor Willmann is "a blind worshipper of past glory," for we are told explicitly that he is fully alive to "the achievements of modern educationists, especially of Herbart." The work lives up to this claim. Aside from the translator's footnotes it seems to come no nearer to our times than J. S. Mill and Bain and the English education act of 1870, though one date as near as 1892 has been noted.

The first seventy-five pages are given to a general introduction in which a certain social viewpoint is presented. The main body of the work consists of a general history of education from early historical times presenting this point of view. The book is thus to be classed as a certain type of philosophic history of education, rather than as a "science of education." Its chief value to the American student, however, will be itself as an exhibit in the history of educational thought, for it belongs distinctly to the side and to the past. Some few specialists among us may profitably read the work to study more adequately this point of view. Its use otherwise, the reviewer fears, will be to lead young and unsuspecting students, segregated for the purpose, into thinking (as is intimated in the preface) that this sort of thing represents "the greatest achievement of modern

pedagogy." If so, the real effect will be to keep some of the younger among us ignorant of what the rest are thinking about.

William H. Kilpatrick.

Teachers College,
Columbia University.

The Ruin of the Ancient Civilization and the Triumph of Christianity.—By Guglielmo Ferrero. Translated by the Hon. Lady Whitehead. G. P. Putnam's Sons. 1921. 210 p.

In this book Signor Ferrero presents an account of the decay of Roman civilization during the latter half of the third century and the first half of the fourth. Of the five chapters that make up the book, four are concerned with "The Ruin of the Ancient Civilization." The last chapter expresses the belief that the chief cause of the decomposition is present to-day, and that if remedial measures are not adopted, our own civilization will disappear.

In 235 A.D. "the ancient civilization was still intact." Fifty years later, it "was no more than an immense ruin." The change was due to a repudiation of the principle of authority. To quote the author, "the first cause is a great political crisis . . . which was engendered by the civil wars that followed the death of Alexander Severus and that were prolonged for half a century." This crisis was precipitated by a "formidable political accident—the destruction of the authority of the Senate effected by the revolution of Septimius Severus."

The Roman emperor received his authority from the Senate by means of the *lex de imperio*. Marcus Aurelius, without consulting the Senate, chose his son Commodus to succeed him. A conflict immediately arose between the Senate and the emperor, "a conflict so violent that Rome had seen nothing like it since the days of Domitian." The civil war that followed the assassination of Commodus placed Septimius Severus upon the throne. He immediately reconstituted the Senate to suit himself, giving its privileges, for the most part, to the Equestrian order. The decomposition was still further enhanced by Valerian's plan of partitioning the empire. "The unity of the Empire, that great work and great thought of Rome, was thus broken for the first time."

The problem of the Empire was to find a new principle of authority and legality. Aurelian, *restitutor orbis*, in his establishment of a state religion, Latinized Mithraism, made "an effort to find in mystical absolutism a principle of legality which should replace the old validation of the Senate." The emperor was divine. Diocletian continued Aurelian's plan of "making the Roman Empire and Asiatic Empire in the hands of an absolute sovereign, who should appear to his subjects as an incarnation of divinity itself." According to Ferrero, "There was not at that time in the whole civilized world known to the Greeks and Romans, any other principle of authority that could have been adopted." Diocletian's attempt to reconstitute authority on the basis of the principles of coöptation, the partition of the empire, and the divinity of the emperor but furthered the process of destruction.

Christianity, which had become somewhat influential in the late third century, was a disintegrating element, chiefly because it preached abstention from participation in political and military life. "He that warreth for God should not entangle himself in the affairs of this world." "The supreme object in life is the moral and religious perfection of the individual." Man has only one real master—God. "It was this new conception of life by which Christianity revolutionized the intellectual and moral foundations of the ancient civilization . . . and which finally triumphed over the awful disorders of the third century and produced a supreme reaction against disorder." The triumph of Christianity in the following century marked the end of the ancient civilization. "It was in the intellectual discipline which had been preserved by dogma all through the chaos of the Middle Ages that little by little Europe found again and reëstablished the principle of authority which the Empire had sought in vain, and which once more made it possible to reconstruct strong and stable governments."

Ferrero sees a weakening of authority in our own day, in western Europe, and foresees a similar disintegration in the twentieth century. "The World War has produced many ruins, but the others are trifling in comparison with this destruction of authority. If Europe possessed governments of unquestioned power and of recognized authority, the work of reconstruction . . . would be rapid and easy. But ruined as she is . . . the greater part of Europe may soon fall into a long anarchy. The history of the third and fourth centuries enables us to realize what would then take place in Europe. The principle of authority is the key to all civilization."

In the first part of the work, the author proceeds on a *terra firma* with which he is familiar. When he ventures into prophecy, his thesis rests on a rather incomplete analogy. It is evident that he cannot detect the principle of authority that may be inherent in the will of a sovereign people.

Robert F. Seybolt.

University of Illinois.

The New World. Problems in Political Geography.—By Isaiah Bowman. World Book Company. 1922. 602 p.

During the last year of the World War, Doctor Bowman, Director of the American Geographical Society of New York, had under him a large staff of geographical experts and clerical helpers compiling exact information regarding economic, linguistic, and racial problems in Europe which might be needed when peace was made. This great storehouse of accurate information has been available for the present work; perhaps has made it possible. Its title gives a very inadequate idea of the contents, and the charming picture of a ship on the cover leads one to expect an eighth-grade textbook. Starting with "Problems of Imperial Britain" the author surveys the political, economic, and racial problems of each state of the New Europe and Western Asia. This takes 469 pages. Then he goes

to the Central Asia, the Far East, the Pacific problems, and the African colonies of the European powers. A last chapter, pp. 559–581, deals with "Latin-American Trade and Boundary Disputes," the least satisfactory part of the book.

The best feature of the book is the remarkable collection of 280 maps, some small but many covering the full page. And they are accurate maps on which one can depend. They show the physical features of the land; climatic conditions; density of population; location of the basic economic resources, such as coal, iron, petroleum, and timber; wheat, rice, and other agricultural staples; racial groups; religious divisions; transportation routes; industries; and all sorts of boundary questions. At first one might think the book a manual of geography, but it contains much recent history, political science, and economics. In short, it is a sort of geographic and economic encyclopedia.

The scope of the book is so wide that of necessity nearly every country gets too summary treatment. The historical parts are usually much condensed, in some cases so much as to confuse readers who may not already possess full historical information. Page 236 is an example of this. Here the author should certainly have told less or more—the reviewer believes far more than is told. Everywhere the author shows sound scholarship, thoroughness, and fairness. He does not hesitate to express criticisms of boundary settlements in some cases, but in a sane and reasonable manner. He realizes that the treaties contain many imperfections, but seems to believe that time will solve most of the hard problems.

The book will be of the very greatest value to students and teachers of modern European history, geography, and economics, to journalists, to librarians, and to a great host of general readers. It will be an almost indispensable reference book for many years.

CLARENCE PERKINS.

UNIVERSITY OF NORTH DAKOTA.

Report of the Committee appointed by the Prime Minister to inquire into the position of the Classics in the Educational System of the United Kingdom.—Published by HIS MAJESTY'S STATIONERY OFFICE, 1921.

This is one of several committee reports on the present status and value of the major studies in the educational system of Great Britain, with recommendations for reorganization. The following have now appeared: *Modern Studies* (Modern Languages), *Classics* (Ancient Languages), *Natural Sciences*, and *English*. A further comprehensive report, harmonizing these separate reports, is awaited.

The Report on the Classics was prepared under the chairmanship of the Marquess of Crewe. All the members, some of them distinguished scholars, are specially interested in the classics. Numerous "witnesses" from all walks of life were examined (governmental departments, educational associations, schools, colleges, universities, organized labor, and private individuals whose opinions would be expected to have weight). It is to be noted, therefore, that the Report, and its historical features,

apart from its statistics and its historical features, is a composite enlightened, and more or less interested, *opinion*.

It is to be noted that the classics, chiefly Latin, are studied from four to nine years [that is, the total amount of time that an English boy devotes to Latin (and in some cases Greek) covers a period of four years, six years or nine years, according to the school he attends and the course of study (with or without specialization) he chooses]. There is, therefore, no possible comparison with our system. Failure to appreciate this distinction will vitiate all conclusions that we may draw from the Report. In such schools as Eton, Rugby, the hours per week devoted to the classics vary from 5 or 6 to 13 or 15, according to the year of study and the destination of the pupil (many of whom go in for the Classical Honors scholarships for Oxford and Cambridge). In other words, it is premised all through the Report that students of Latin and Greek should master the subject; and in the longer courses they must have obtained a considerable grasp of the literature and history and civilization as a whole. Whatver is said, then, in this Report of praise of Latin and Greek (and the authors have gone the limit) must be understood as deriving from the mastery, more or less complete, of the subjects represented. This is true even when reaction upon English is given as one of the claims of the classics ("they must be studied with a thoroughness which can only be attained at the cost of much time and pains," p. 257). Even in the shorter courses, nowhere less than four years for Latin, this thoroughness is stressed; "for Latin to flourish as a school subject it is important, if not essential, that the average length of school life after 12, in schools where Latin is begun at that age . . . although with some preliminary instruction in advance of school entrance, should not be less than four years" (p. 62).

For those pupils who can not master the language, the Committee wants some contact with the classical spirit through translations, visits to museums, public lectures. Repeatedly the Report stresses the statements (1) that the pupil has gained little if he does not go beyond the mastery of the language to the absorption of the spirit of the ancient civilization through its literature, art and history (this is asserted even for the modern foreign languages, cf. p. 76), and (2) that translations and second-hand studies in English can not possibly take the place of a first-hand mastery of the medium (here Latin and Greek) through which a nation expresses itself. However, a more extended use of translations and other second-hand media is recommended (it is gratifying to see that two American authors (Breasted: *Ancient Times*, and Botsford: *History of the Ancient World*) are highly recommended in this connection).

The Report has much to say about method. It insists upon much oral work, especially in the early stages of the instruction ("Language is speech and any method of teaching a language ancient or modern which fails to take account of this aspect of it seems to us to be so far wanting," p. 143). It points out that not enough attention is paid to the solid and permanent acquisition of a working vocabulary ("it is difficult to take pleasure or even intelligent interest in a language while every fourth or fifth word has to be looked up in a dictionary," p. 147). It lends its influence toward the adoption of a uniform grammatical nomenclature, referring especially

o the excellent parallel grammar series of Prof. E. A. Sonnenschein, p. 162).

The Report stresses so heavily the incomparable advantages for English, of a thorough study of Greek and Latin that one may be pardoned and not too seriously accused of malice in calling attention to the caption of one of the divisions of the Report: "Should no Latin Be Taught to Some Pupils?" But even in this connection the Report acknowledges that, or certain periods of English (language, literature, and institutions) Frenc, German, Spanish, and Italian are important. The Report condemns a teacher of Latin who knows no Greek; and it condemns a teacher of Lin and Greek who knows no modern foreign language. However it naïvly states (p. 261): "If parents come to believe that Latin and Greek hav a value which no other subjects possess, they will be eager that their chil ren should learn them."

e Committee does not attempt to pass upon the question as to wh her Latin or French should be the first foreign language; but it does st , with frank disinterest, that if only one can be studied, it should be Fch. And it does not deplore the desertion from the classics, after fa trial, of those linguistically less gifted.

ne of the most interesting features of the Report is the evidence given t t vocational studies are not only not the best foundation for the vo ions, but that organized labor demands that opportunity for humanitian studies be afforded their children (cf. p. 112; pp. 261–262).

One of the most necessary measures to be taken is the securing of a pply of adequately prepared teachers of the classics. That is one of e most disquieting features of the whole problem of the classics in merica as well as in England.

William R. Price.

State Department of Education,
Albany, New York.

OUR CONTRIBUTORS

MR. EDWIN B. STEVENS, who is the executive secretary of the University of Wisconsin, in his article "Can We Pay for Education?" gives convincing evidence that expenditures for education must be increased. Our readers will recall with satisfaction Mr. Stevens's article in the October 1920 number of the REVIEW on "Cost Accounting in Universities." An old contributor to the EDUCATIONAL REVIEW will be discovered this month in Dr. S. S. COLVIN, director of the School of Education, Brown University. In two earlier issues of the REVIEW, June 1920 and September 1921, Doctor Colvin discussed the validity of intelligence tests as a means of determining college entrance and the relation between psychological scores and academic standing. DOCTOR KILPATRICK, who is professor of the Philosophy of Education, Teachers College, Columbia University, is considered by many the most skillful teacher in the academic field In the present article he gives us the benefit of his own thinking and xperience in connection with the widely discussed project method. I the present number MR. PEARSON concludes his illuminating article on "resent School Movements in Germany." Mr. Pearson is a member othe foreign division of the United States Bureau of Education and has een abroad studying European systems of education. DR. ALLAN L. CARER, who contributes the article in this issue "How Shall ShakespeareBe Taught in High Schools?" is an associate professor of English at Pensylvania State College. DR. GEORGE B. COUNTS, as the present conibution makes obvious, came to the study of education after a carel training in sociology. Doctor Counts is professor of Secondary Educatn at Yale University.

In our November issue PROFESSOR COLVIN concludes his discussio, "The Progress of Mental Testing." Among other very interesting cotributions will be MISS WOOLSTON'S article on "The Russell Sage Foundtion" and DOCTOR ZOOK'S contribution on "Teachers of Social Science i our Secondary Schools."

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